

TRANSPORTATION ELECTRIFICATION IN THE SOUTHEAST

Fifth Annual Report – October 2024

By Matthew Vining and Moe Khatib



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About Atlas Public Policy

Atlas Public Policy equips businesses and policymakers to make strategic, informed decisions that serve the public interest. Atlas builds analytical tools and dashboards using powerful, accessible technology, and offers expert advisory services to tackle the pressing issues of the day.

About the Southern Alliance for Clean Energy

The Southern Alliance for Clean Energy (SACE) is a nonprofit organization that promotes responsible and equitable energy choices to ensure clean, safe and healthy communities throughout the Southeast. As a leading voice for energy policy in our region, SACE is focused on transforming the way we produce and consume energy in the Southeast.

Executive Summary

The last 12 months in the Southeast have seen significant growth in electric vehicle (EV) adoption and EV charging deployment. The Southeast has continued to establish itself as a major hub for EV and battery manufacturing. As of June 30, 2024, the region has attracted \$78 billion in announced manufacturing investments and nearly 74,000 anticipated jobs. In this same period, the Southeast has added over 1,800 new direct current fast charging (DCFC) ports, though states in the region still lag the national average for charger deployment per capita. Considerable investments in EV charging infrastructure for medium and heavy-duty vehicles will be needed in much of the country, including the Southeast, as this market develops. Cumulative new light-duty EV sales in the Southeast grew 42 percent year-over-year, from 455,200 vehicles to 645,400 vehicles, with Florida holding the largest EV market share at 8.9 percent. Investor-owned utilities (IOUs) have secured \$6.6 billion in transportation electrification investments nationwide, with IOUs in the Southeast contributing just \$394 million (six percent of the national total). Nationally, the average approved investment per utility customer is \$38, while utilities in the Southeast rank slightly lower, with Florida Power & Light and Duke Energy Florida coming closest to the average.

In the past year, the Southeast saw a \$268 million increase in federal funding for transportation electrification due to the Inflation Reduction Act (IRA) and the Infrastructure Investment and Jobs Act (IIJA). Cumulative federal funding for electric transportation has increased more than 290 percent since IIJA was signed into law. Meanwhile, state funding grew by just \$1.2 million, highlighting the gap in ambition between state and federal governments on electrification. To date, state agencies and school districts have been awarded \$405 million in Clean School Bus funds for electric school bus purchases and have begun to use their \$680 million allocations from the National Electric Vehicle Infrastructure (NEVI) program to expand EV charging networks. While none of the states in the region have a NEVI-funded charger in operation, this is not unique to the Southeast as most states have not opened a station. Florida is a laggard on NEVI implementation as the state does not appear to have taken any action to advance its allocated NEVI funds for charger deployment.

State governments in the Southeast have also shown some support for the EV transition. Legislative actions in North Carolina and Georgia have explored additional EV fees, while some recent bills in Florida promote EV growth and others limit growth. Concurrently, the region is focusing on developing a skilled workforce through specialized training programs and community partnerships that support expanding EV infrastructure, battery production, and supply chains. While much progress has been made in the region, the Southeast still

faces challenges to keep up with the rapid pace of the EV transition around the country, and across the globe.

About the Data

Data used to develop this report and track metrics described below are derived from the Atlas EV Hub: www.atlasevhub.com and EV Jobs Hub: <https://evjobs.bgafoundation.org>, and are pulled through the end of June 2024, unless otherwise noted. Where data are not derived from EV Hub or EV Jobs Hub, the source is noted.

Electric Vehicle (EV) Sales are sourced from data provided by Experian (2019-present) and the former Alliance for Automobile Manufacturers (2011-2018). New vehicle registrations from both data sources are used as a proxy for EV sales. Aggregated EV sales data for all states are provided by vehicle make and model since 2019 and include light-duty battery EVs (BEV) and plug-in hybrid EVs (PHEV). Light-duty vehicles account for classes 1-2A, medium-duty vehicles classes 2B-6, and heavy-duty 7-8, using GVWR as the indicator. Sales data includes new vehicle sales only. Large passenger vehicles such as the Rivian R1T and R1TS, GMC Hummer EV, and Tesla Cybertruck are classified as medium-duty.

EV Manufacturing Employment and Investment measures the number of private-led, direct manufacturing jobs and investment for light-, medium-, and heavy-duty EV assembly; critical minerals processing and separation; EV battery production; EV battery recycling; EV parts manufacturing; and EV charger manufacturing. This is tied to specific facilities and is usually reported directly by companies in public statements. Previous iterations of this report did not account for investments in minerals. While this data is updated weekly to reflect new announcements or updates to previous announcements, these investments and/or jobs may not eventuate or may look different from the original announcement.

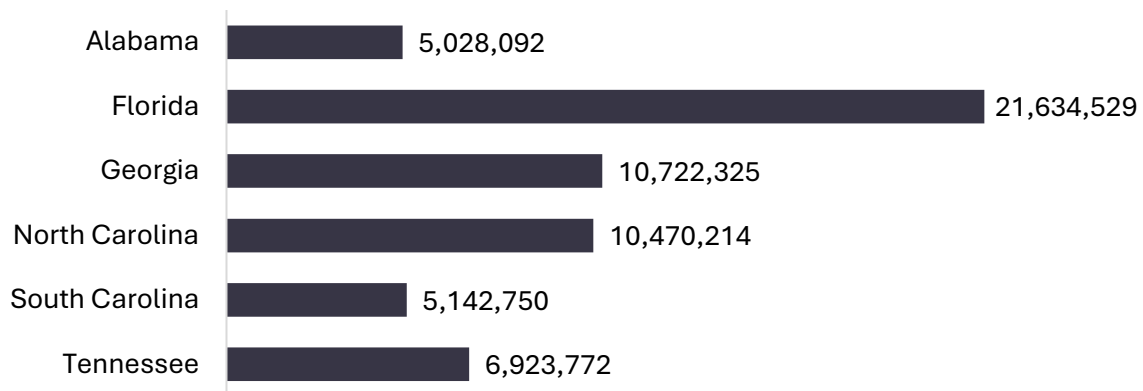
Electric Utility Investment tracks EV-related investments and is sourced from investor-owned electric utility dockets filed with state utility regulatory commissions. The investment data includes both EV programs proposed by utilities that await commission approval as well as investments approved or denied by commission orders. Data does not include investments from electric cooperatives and municipally-owned utilities.

Public Funding for EVs tracks federal and state government funding programs dedicated to transportation electrification, including funding allocated through the Volkswagen Settlement. Funding considered includes awarded, made available, or allocated to states. Does not include loans or tax credits.

EV Charging Deployment tracks all deployed publicly available EV charging infrastructure and is sourced from the U.S. Department of Energy’s Alternative Fueling Station Locator. In addition to this tool, Atlas’s Medium and Heavy-Duty (MDHD) Charging Investment Dashboard tracks charging sites and ports specifically dedicated to medium and heavy-duty EV charging, collected from press releases and company announcements. Charging equipment may have multiple connectors (plugs), however, Atlas does not count those connectors as separate ports unless both are able to supply power to a vehicle at the same time.

Population Data is sourced from the U.S. Census Bureau’s American Community Survey (ACS). The most recent data has been gathered from the 5-year ACS 2022 data file, so current population numbers reflect the year 2022. These data are used to calculate per capita metrics. Current estimates for state populations may differ from what is used in this report.

Figure 1. Population by State in 2022



This chart shows the population of each state in the Southeast as of 2022, based on the 5-year ACS 2022 data report.

Source: U.S. Census Bureau [1]

Introduction

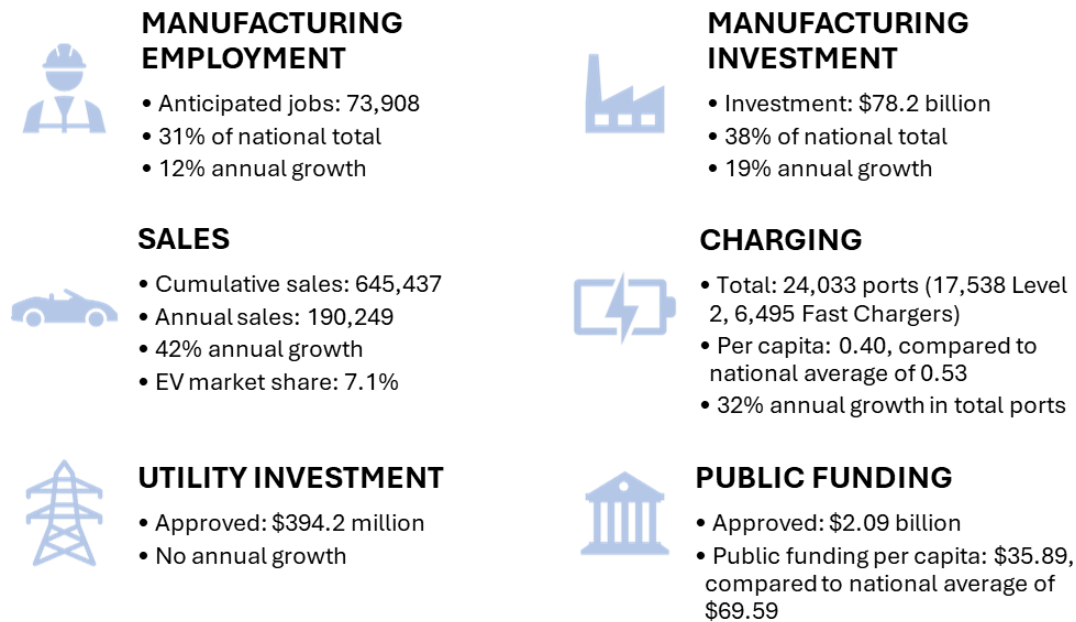
Since September 2020, Atlas Public Policy (Atlas) has partnered with the Southern Alliance for Clean Energy (SACE) to publish a report on Transportation Electrification in the Southeast. This report benchmarks progress on transportation electrification in six states in

the Southeast: Alabama, Florida, Georgia, North Carolina, South Carolina, and Tennessee. This is the fifth report and provides an update on progress from July 2023 through June 2024.

Over the past year, vehicle manufacturers—both domestic and international—have significantly increased their investments in EV manufacturing facilities in the United States, often leveraging federal tax credits provided by the Inflation Reduction Act (IRA). The Southeast has emerged as a major hub for private sector investment in EVs, spurring economic growth and job development in the region (Figure 2).

On the federal level, robust policies and regulations have contributed to a growing EV market nationwide. Earlier this year, the U.S. Environmental Protection Agency (EPA) finalized the strongest-ever vehicle emissions standards for light-, medium-, and heavy-duty vehicles to protect public health and address the climate crisis. For light-duty vehicles, it is estimated that EVs could make up 69 percent of all new passenger vehicle sales by 2032 under EPA's final emissions rule [2].

Figure 2. Electric Transportation Indicators in the Southeast Through June 2024



Sales measures include light-duty EVs. Manufacturing Employment and Manufacturing Investment refers to announced investments in EV assembly, EV parts, EV charging infrastructure, batteries, mineral processing, and battery recycling facilities. Charging refers to publicly accessible chargers, and rankings and growth include Level 2 and fast chargers. Utility Investment refers to investor-owned utilities only. Public funding includes both awarded and allocated funds. Totals are cumulative unless stated. Rankings are for all time, except for market share which is over the 12 months between July 2023 and June 2024.

Source: [Atlas EV Hub](#) [3] and [EV Jobs Hub](#) [4] for the Southern Alliance on Clean Energy

Over the past three years, Congress has enacted the Infrastructure Investment and Jobs Act (IIJA), otherwise known as the Bipartisan Infrastructure Law, and the IRA, providing unprecedented amounts of funding for transportation electrification through grants, loans, and tax credits for consumers and manufacturers. National Electric Vehicle Infrastructure (NEVI) program funding has been made available to Southeast states, and state transportation officials in the region have made progress in distributing these funds to private charging infrastructure companies through state-run competitive application processes. Other federal programs bolstered by IIJA and IRA have been taking shape in the Southeast as well, including the EPA's Clean School Bus Program, which awards grants and rebates for the purchase of zero and low-emission school buses. Public policy and industry support are complementing these federal laws and programs to boost investments and advance electric transportation in the Southeast.

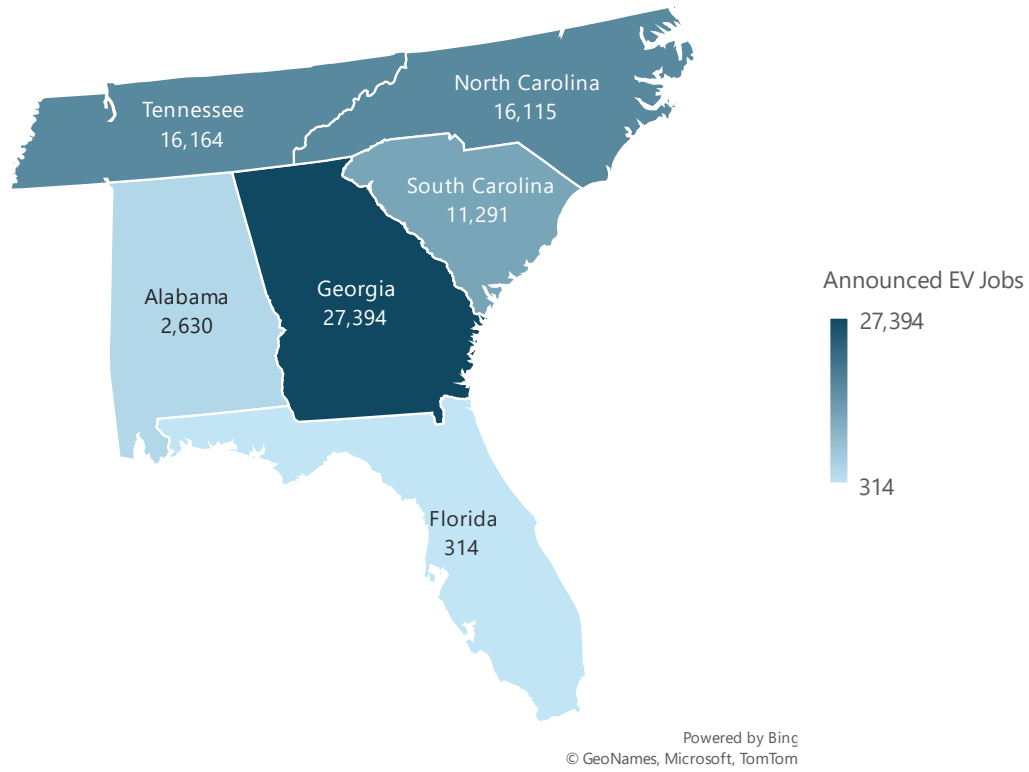
The Southeast is experiencing significant growth in EV manufacturing investment and job creation. However, challenges remain, particularly in advancing utility engagement and expanding charging infrastructure. Addressing these areas will be crucial for the region to fully capitalize on its potential in the evolving EV landscape.

Manufacturing Jobs and Investment

The Southeast has continued to see growth in EV manufacturing jobs and investment over the past 12 months. The region has experienced \$78.2 billion in announced manufacturing investments and more than 73,900 anticipated manufacturing jobs as of June 30, 2024. This level of investment and jobs are tied to over 100 facilities throughout the region (counting minerals processing, battery production and recycling, EV charging, EV assembly, and other EV component manufacturing operations). Of the 238,000 EV manufacturing jobs announced across the country, 31 percent of these anticipated jobs are in the Southeast (Figure 3). Similarly, of the \$205 billion in announced investments, 38 percent is tied to facilities in the Southeast.

EV manufacturing continues drive job creation in the region. Georgia leads the nation in announced EV manufacturing jobs and the Southeast accounts for three of the top eight states in the country for most anticipated EV manufacturing jobs—Georgia, North Carolina, then Tennessee. Four of the eight top states in the country for most EV manufacturing investments are in the Southeast—Georgia, North Carolina, Tennessee, then South Carolina. Announced EV manufacturing jobs in the Southeast have grown 12 percent over the past 12 months and investment has grown 19 percent. About 60 percent of the committed investments in the region are dedicated to battery and battery materials manufacturing facilities (Figure 4). Another significant share of announced investment, about 22 percent, is dedicated to original construction and retooling of existing facilities to produce light-duty EVs.

Figure 3. Announced EV Manufacturing Jobs by State in the Southeast

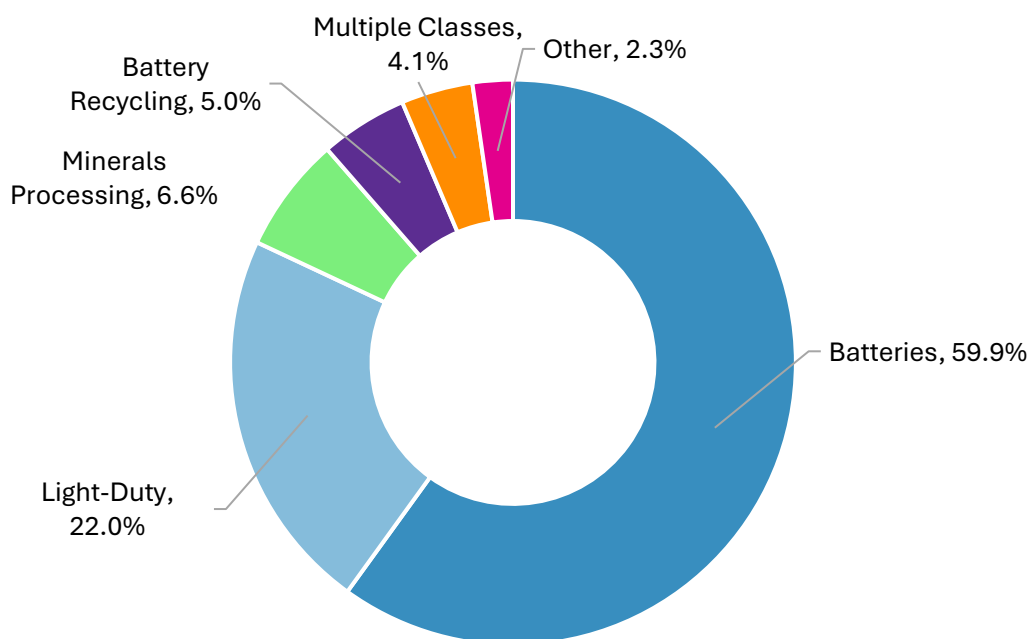


This map shows announced EV manufacturing jobs (including minerals processing, EV assembly, battery manufacturing and recycling, EV charging manufacturing, and other EV component manufacturing) by state. Data is through June 30, 2024.

Source: [EV Jobs Hub](#) [4] for the Southern Alliance on Clean Energy

Table 1 summarizes the largest EV manufacturing investments in the region, two of which increased their original investments over the past 12 months. To date, all of these investments have started to materialize, with every facility currently under construction. In some instances, facilities like the Hyundai Metaplant in Georgia are ahead of schedule [5], while others have delayed facility construction due to unforeseen challenges or barriers to starting up production such as Rivian [6] in Georgia and VinFast [7] in North Carolina.

Figure 4. Percentage of Announced Manufacturing Investment by Sector in the Southeast



This chart shows the percentage of announced EV investment by manufacturing sector. The ‘Other’ category includes EV Parts, EV charging and medium and heavy-duty vehicle assembly. The ‘Multiple Classes’ category describes manufacturing investments made for facilities that produce vehicles from more than one class: Light-Duty, Medium-Duty, and Heavy-Duty. Data is through June 30, 2024.

Source: [EV Jobs Hub](#) [4] for the Southern Alliance on Clean Energy

Table 1. Largest EV Manufacturing Announcements by Investment in the Southeast

State	Company	Facility Name	Anticipated Jobs	Announced Investment	Status
NC	Toyota	Toyota Battery Manufacturing North Carolina	5,100	\$13.9 billion	Under Construction
GA	Hyundai, LG Energy Solution	EV Battery Cell Manufacturing Facility (JV)	3,400	\$6.3 billion	Under Construction
TN	Ford, SK On	BlueOval SK Tennessee (JV)	5,800	\$5.6 billion	Under Construction

Transportation Electrification in the Southeast

State	Company	Facility Name	Anticipated Jobs	Announced Investment	Status
GA	Rivian	Georgia Manufacturing Plant	7,500	\$5 billion	Construction Delayed
GA	Hyundai, SK On	Bartow County Facility (JV)	3,500	\$4 billion	Under Construction
NC	VinFast	Chatham County Facility	7,500	\$4 billion	Construction Delayed

Multiple dates indicate successive announcements for the same facility. Companies may not necessarily deliver these jobs and there is often little clarity regarding the types and quality of jobs available. This table shows EV manufacturing jobs only and does not reflect corporate or research and development jobs. Data is through June 30, 2024.

Source: [EV Jobs Hub](#) [4] for the Southern Alliance on Clean Energy

After North Carolina landed its first battery and vehicle manufacturing investments from Toyota and VinFast in 2022, Toyota significantly increased its investment in its Liberty-based battery manufacturing plant to \$5.9 billion in two separate expansion announcements in August 2022 and May of 2023. Later in October of 2023, Toyota announced an additional investment of \$8 billion and expects to add 3,000 more jobs to the facility. The now \$13.9 billion battery manufacturing facility is expected to generate 5,100 jobs in total and will come online in 2025. The facility will begin production with 100 percent renewable energy and host six production lines supporting battery electric and plug-in hybrid electric vehicles [8].

Hyundai has also been busy this past year preparing to begin production at its battery manufacturing and EV assembly Metaplant located in Bryan Country, Georgia. Hyundai and LG announced at the end of August 2023 that they would be investing an additional \$2 billion and committing 400 additional jobs to their battery joint venture at the Metaplant. With this expansion, the 30 gigawatt-hour battery facility will be able to support the production of 300,000 Hyundai, Kia, and Genesis vehicles annually at full operations. The company has moved up timelines and now is expecting to begin producing vehicles and batteries sometime in 2024, with the IONIQ 5 SUV as the first model to be produced at the Metaplant. As of July 2024, more than \$2.7 billion in investment and an anticipated 6,900 jobs across the state have been announced by the Metaplant's 17 suppliers [9].

The Southeast has attracted significant EV manufacturing investment for reasons such as its ample large parcels of inexpensive land and low industrial electricity rates [10] [11]. In exchange for choosing sites in the Southeast and promising jobs and economic

development for the surrounding communities, companies have been awarded \$10 billion in state and local subsidies. Other reasons for the significant growth across the Southeast include all six states' right-to-work status,¹ lower labor costs, proximity to other production sites, access to two of the nation's largest ports in Savannah and Charleston, and connection to major transportation corridors across the region.

Unionization Efforts in the Southeast

With the influx of EV manufacturing jobs in the Southeast, there is increasing interest in the quality of these jobs. Workers want to understand how these new roles ensure fair and stable wages, safe work environments, job security, and benefits, amongst other indicators of a good job [12]. One way to ensure these benefits is through representation by a union. However, just 16 percent of jobs at operational EV manufacturing facilities around the country have union representation.

The United Auto Workers (UAW) has campaigned aggressively to unionize EV facilities. Earlier in 2024, and in the wake of significant gains through a strike in 2023 by the UAW against the Detroit's "big three" (Ford, General Motors, and Stellantis) the UAW announced they would be committing \$40 million in organizing funds through 2026 [13]. This new funding commitment will support non-union autoworkers and battery workers who are organizing across the country, with a particular focus on the South [14]. Gains workers received in their new contracts with the Detroit big three include higher wages that account for cost-of-living increases, retirement contributions, and other benefits [15]. Similar benefits could flow to employees in the Southeast if they reach a decision to unionize.

In April 2024, employees at Volkswagen's Chattanooga plant voted to join the UAW union [16]. This decision came after workers had previously rejected unionization attempts twice, signaling a shift in workers' confidence in union representation. The new contract will increase union wages by one-third. Unionization efforts stumbled with a vote in May 2024 to unionize a Mercedes-Benz plant in Alabama that failed with 56 percent of workers voting no [17]. Then later in May, the United Steelworkers union ratified their first union contract at the Blue Bird facility in Fort Valley, Georgia, after voting to unionize a year prior. The union said the new contract would provide all covered workers with a 12 to 40 percent raise and contributions to a retirement plan, shared profits, and health and safety improvements [18].

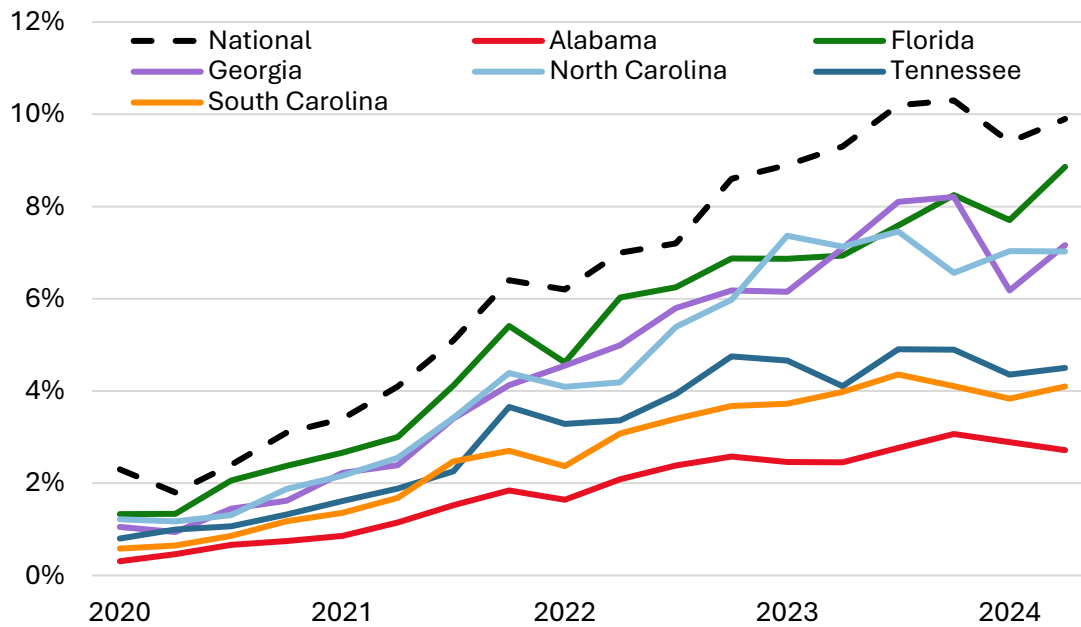
¹ A "right-to-work" state refers to states that have established legislation allowing employees to work for an employer without joining a union or paying for agency fees, making it harder for workers to unionize in these states [80]. Research shows union workers may earn between 10 and 15 percent more than non-union workers [81].

During this period of unionization activity in the Southeast, six governors, including those from Alabama, Georgia, South Carolina, and Tennessee issued a joint statement in April discouraging the UAW union campaign, claiming it could put at risk worker's jobs and the auto industry's wellbeing in the South [19]. Union activity at manufacturing locations across the country, and their successes in increasing their wages through contractual agreements, have also had an effect on increasing wages elsewhere where facilities are not represented by a union [20]. Toyota, Honda, and Hyundai all announced wage increases just weeks after the UAW reached its agreement with Ford, General Motors, and Stellantis [21] [22]. The wage increases apply to all U.S. factory workers at Honda and Toyota plants. Facilities covered under the pay bump for Hyundai include the Bryan County plant in Georgia and its manufacturing plant in Montgomery, Alabama.

EV Sales and Market Share Trends

The EV market continues to grow apace in the Southeast, with light-duty vehicles making up the majority share. Cumulative new light-duty EV sales in the Southeast grew 42 percent over the preceding 12 months, from 455,200 vehicles to 645,400 vehicles. In Q2 2024, the new light-duty EV market share in the Southeast was 7.1 percent, up from 6.2 percent in Q2 2023. The region still trails the national market where EVs made up 9.9 percent of all new light-duty sales in Q2 2024, up from 9.3 percent in Q2 2023. Similar to the national trend, new light-duty EV sales market share in the Southeast dipped in the first quarter of 2024, but as of Q2 2024, most Southeastern states have risen again and continues to gain momentum (Figure 5). Florida leads the Southeast with an 8.9 percent new light-duty EV market share in Q2 2024, followed by Georgia with 7.2 percent. Alabama had the lowest EV market share in the region again, at 2.7 percent, up from 2.5 percent in Q2 2023. Florida continues to outpace all other states in the region, with cumulative new light-duty EV sales of 335,800, followed by Georgia with 125,700. This means that Florida is home to more than half of all new light-duty EV sales in the Southeast. Moreover, five of the six states in the Southeast experienced an annual growth rate in new light-duty EV sales that exceeded the national average of 37 percent.

Figure 5. EV Sales Market Share for Light-Duty Vehicles in the Southeast

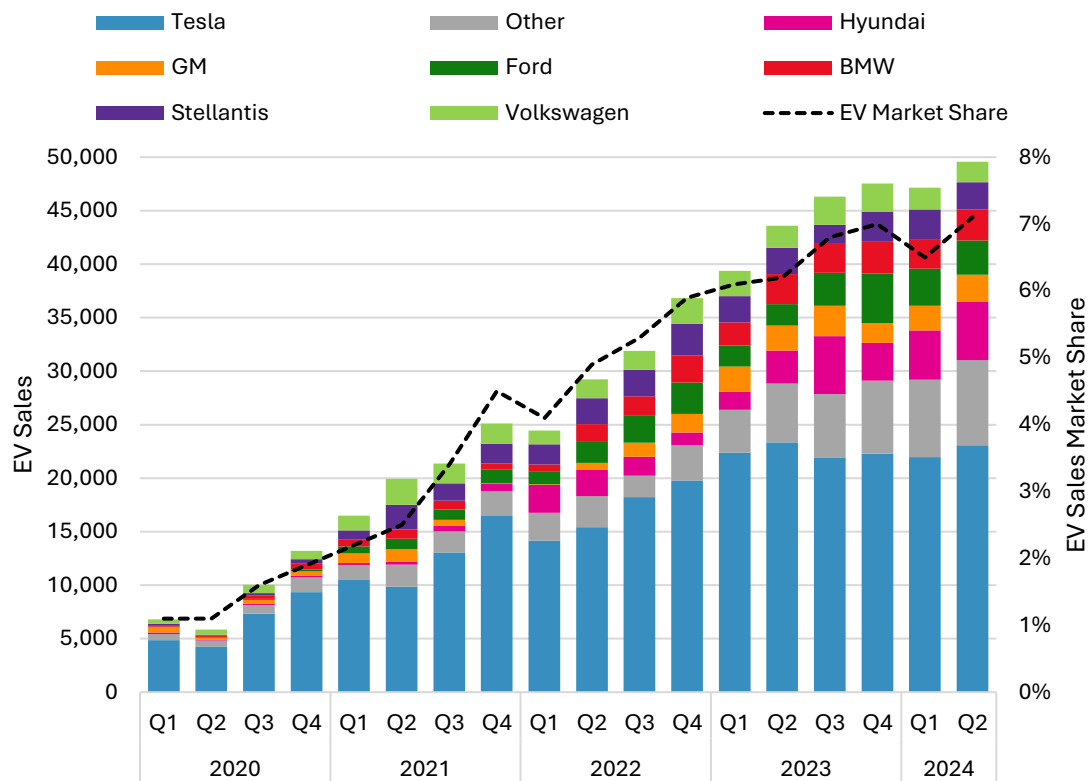


This figure depicts EV sales as a percentage of new light-duty vehicle sales from 2020 to the end of June 2024. EV includes both BEV and PHEV sales.

Source: [Atlas EV Hub](#) [3] for the Southern Alliance on Clean Energy

Although their market share has decreased since last year, Tesla remained the dominant EV automaker in the region, capturing 43 percent of all new light-duty EV sales in the first six months of 2024. Hyundai rose in the ranks in 2024 as the second best-selling light-duty EV automaker in the Southeast in the past 12 months, while Ford has the second highest all-time EV sales, after Tesla. The Southeast's new light-duty EV sales portfolio consisted of 40 makes and 122 models, granting consumers a variety of choices for purchase. Besides the popular Tesla Model Y and Model 3, the Ford Mustang Mach-E fared well as the third highest-selling vehicle in the past 12 months. Other popular models included the Hyundai IONIQ 5, Ford F-150 Lightning, and Jeep Wrangler 4xe. See Figure 6 for a breakdown of the leading automakers in the EV market in the Southeast.

Figure 6. Light-Duty EV Sales in the Southeast

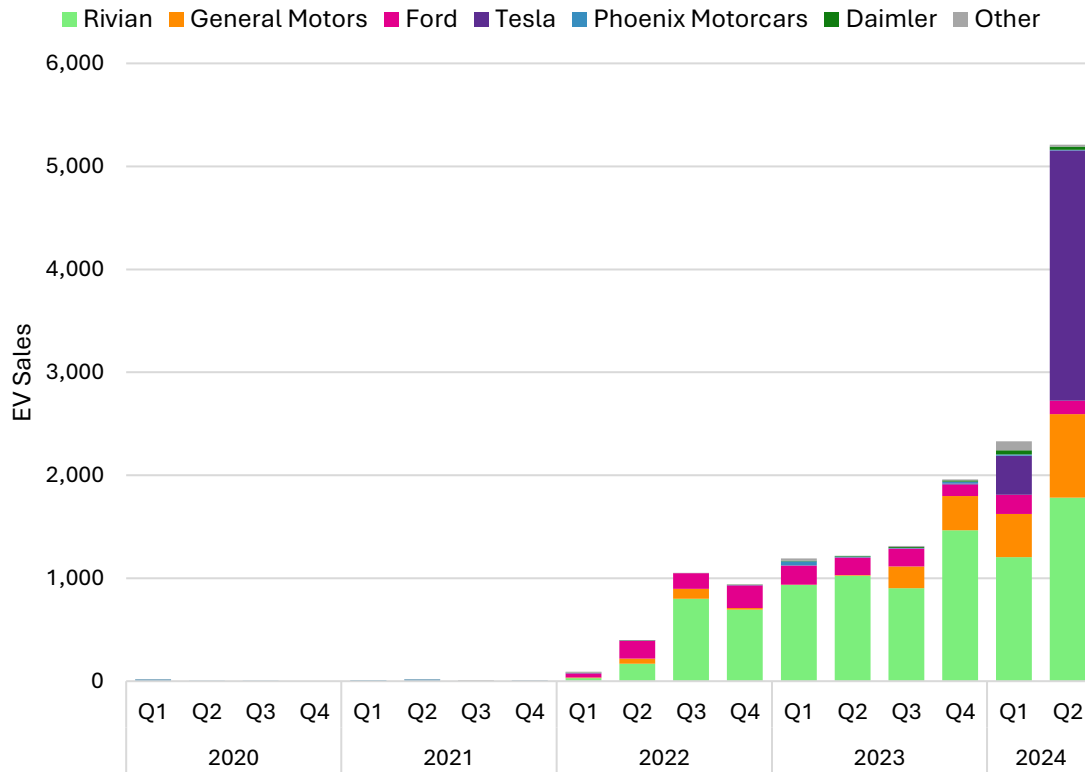


This figure shows new light-duty EV sales over time in the Southeast through the end of June 2024. The EV share line depicts the share of EV sales compared to all new light-duty vehicle sales. Some passenger models such as the Rivian R1S/R1T, Tesla Cybertruck, and GMC Hummer EV are not included here as they are class 2B vehicles and therefore classified as medium-duty vehicles.

Source: [Atlas EV Hub](#) [3] for the Southern Alliance on Clean Energy

Medium- and heavy-duty vehicle (MDHD) EV sales and deployments are picking up momentum in the United States. A combination of increased public funding and supportive regulations, like California’s Advanced Clean Trucks (ACT) rule, has driven this growth nationwide. These initiatives are accelerating the adoption of electric MDHD vehicles by creating a more favorable market for fleet operators looking to transition from diesel-powered trucks to cleaner, electric alternatives. Although the number of new medium- and heavy-duty EV sales continues to tick up in the Southeast, they still amount to less than one percent of all new medium- and heavy-duty vehicle sales in the region.

Figure 7. Medium and Heavy Duty EV Sales in the Southeast



This figure shows new medium- and heavy-duty EV sales over time in the Southeast through the end of June 2024. Because medium-duty includes class 2B vehicles, passenger models such as the Rivian R1S/R1T, Tesla Cybertruck, and GMC Hummer EV are included here and not in light-duty sales.

Source: [Atlas EV Hub](#) [3] for the Southern Alliance on Clean Energy

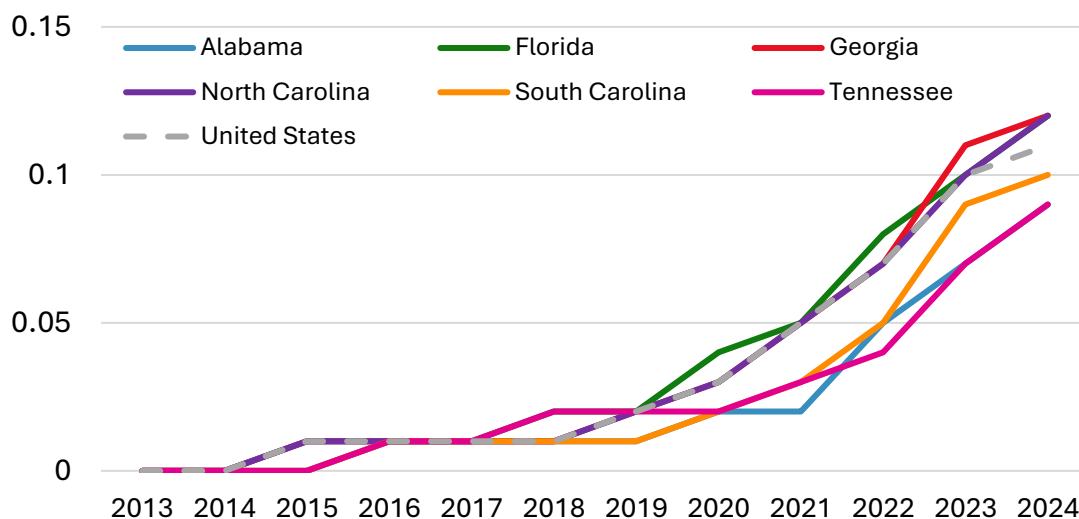
Many leading distributors of medium- and heavy-duty vehicles are now choosing to establish electrification hubs in the region, attracted by its growing infrastructure and favorable business environment. One example is Frito-Lay, which in November 2023, launched a 100 percent electric MDHD fleet at its depot in Charlotte, North Carolina [23]. This milestone made the facility the first all-electric fleet in the country. The Charlotte fleet now drives an average of 800 miles daily and plays a crucial role in Frito-Lay's broader mission to achieve net-zero emissions by 2040.

Charging Deployment

Charging accessibility and reliability are important to enable EV uptake, especially for Level 2 and DCFC charging [24]. Level 2 chargers are typical for home, workplace, and public charging and can charge a BEV to 80 percent from empty in four to 10 hours. DCFC chargers can deliver energy more rapidly and are usually installed along heavy-traffic corridors, charging a BEV to 80 percent from empty in just 20 minutes to an hour. DCFC, or fast chargers, are designed to support long-distance travel, while Level 2 chargers are ideal for local trips and serve as destination charging for long-distance travelers.

In the past 12 months, the Southeast saw progress in their deployment of publicly accessible EV chargers, adding more than 1,820 new DCFC ports, a 39 percent increase year-over-year. Tennessee had the highest rate of growth, a 60 percent increase in DCFC port count. Florida, Georgia, and North Carolina lead the Southeast in cumulative DCFC ports, as well as per capita port count, adding a total of 1,332 new DCFC ports together in the past 12 months. For the first time since this report has tracked charging deployment, these three states all have a DCFC port per capita count higher than the national average (Figure 8).

Figure 8. Cumulative DCFC Ports per 1,000 People in the Southeast



This figure depicts the steep rise in cumulative DCFC ports per 1,000 people installed across states in the Southeast from 2011 onwards, alongside the national average. The figure only accounts for stations still active today, by installation date. Florida and North Carolina converge into a single line in 2023-2024 and from 2016-2022, Florida and Georgia converge into a single line. Data is through June 30, 2024.

Source: [Atlas EV Hub](#) [3] for the Southern Alliance on Clean Energy

Transportation Electrification in the Southeast

There was also meaningful growth in Level 2 charger deployment in the region, with states increasing the number of publicly available Level 2 ports by 29 percent year-over-year (Table 2). North Carolina had the highest year-over-year growth in Level 2 chargers at 44 percent, followed by Florida (31 percent) and South Carolina (29 percent). Combined, all states in the Southeast have a regional average of 0.40 ports (both Level 2 and DCFC) per 1,000 people, well below the national average of 0.53.

Table 2. Charging Ports in the Southeast

State	DCFC Ports (% Change YOY)	Level 2 Ports (% Change YOY)	Total Ports per 1,000 People
Alabama	422 (50%)	629 (21%)	0.21
Florida	2,533 (32%)	7,395 (31%)	0.46
Georgia	1,251 (38%)	3,825 (20%)	0.47
North Carolina	1,202 (46%)	3,207 (44%)	0.42
South Carolina	504 (38%)	924 (29%)	0.28
Tennessee	583 (60%)	1,558 (24%)	0.31
Southeast	6,495 (39%)	17,538 (29%)	0.40
U.S. Total	43,297 (34%)	131,866 (23%)	0.53

Total ports include both DCFC and Level 2 ports. Data is through June 30, 2024.

Source: [Atlas EV Hub](#) [3] for the Southern Alliance on Clean Energy

Although states in the region are closing, and even surpassing in some cases, the national per capita gap with DCFC charging, the lack of Level 2 chargers means the Southeast trails the national average for total charger ports per capita. To complement public efforts, companies are also collaborating and innovating to drive deployment, such as IONNA in North Carolina, see Box 1.

Box 1: 30,000 Fast Chargers by 2030 from IONNA

On July 26, 2023, seven automakers—BMW Group, General Motors, Honda, Hyundai, Kia, Mercedes-Benz Group, Stellantis NV—established a joint venture to accelerate the deployment of charging infrastructure across North America [25]. The companies have committed to deploying at least 30,000 fast chargers by 2030, leveraging private and public funding. The charging network will be accessible to all EVs from any automaker using either SAE J1772 (Combined Charging System (CCS)) or SAE J3400 (formerly North American Charging Standard) connections. Almost one year after its initial announcement, IONNA selected Durham, North Carolina for their headquarters, lab facilities, and manufacturing operations [26]. The headquarters will also house the Customer Experience Lab serving as a central node to seven satellite labs at each of the founding manufacturer's facilities. This investment could aid in the rollout of a well-connected charger network stemming from the Southeast, as IONNA anticipates opening its first stations in 2024.

EV charging infrastructure in the Southeast specifically designed for MDHD commercial fleets and freight traveling throughout the region will be critical for MDHD EV adoption. This will be accomplished with the combination of charging depots for commercial fleets and en-route charging along the national electric vehicle freight corridors designated by the Federal Highway Administration (FHWA). Nearly 200 charging ports serving MDHD demand are already in operation and a further 1,200 DCFC charging ports are planned, under construction, or in operation [27]. About three-quarters of these ports are publicly accessible and an overwhelming majority are dedicated to charging sites in California. None of the publicly announced, known operating, or planned charging ports are sited in the Southeast, though, because many private fleets do not publicize their plans for medium and heavy-duty charging sites, southeastern fleet operators are likely beginning to plan.

In March 2024, the Joint Office of Energy and Transportation (Joint Office) and the U.S. Department of Energy, in collaboration with U.S. EPA and U.S. Department of Transportation, established the first-ever National Zero-Emissions Freight Corridor Strategy. The strategy aims to help align public policy, private and public sector investments, and utility and regulatory energy planning for the acceleration of EV charging and hydrogen fueling freight infrastructure along the National Highway Freight Network [28]. The strategy is designed to accelerate infrastructure buildout along key freight corridors and hubs in four phases. The first two phases will be used to establish priority hubs (2024-2027) and connect hubs along critical freight corridors (2027-2030). States in the Southeast have been

selected as the location for 25 of the more than 200 hubs in the first two phases, with 11 in Georgia alone. It is anticipated that 40 percent of the benefits stemming from the nearly 900,000 square miles of hubs in the first phase are to flow to disadvantaged communities. Phases 3 and 4 will follow in 2030-2040, focusing on expanding corridors and completing the network. While there are not yet any ports or hubs that have started planning or construction, the Southeast is integral to the success of the national EV charging network for MDHD vehicles.

Utility Investment

IOUs play a pivotal role in advancing transportation electrification by serving as the main energy suppliers, overseeing the electrical grid, and funding various aspects of the electrical infrastructure that supports EV charging. As regulated monopolies, IOUs cater to over 70 percent of electricity customers in the United States [29]. This summary exclusively addresses the contributions of IOUs and excludes investments from other entities such as cooperatives, municipally owned utilities, or the Tennessee Valley Authority, which is a federal corporation and the largest public power company in the country.

Through June 2024, IOUs nationwide have been approved for \$6.6 billion in transportation electrification investments, an increase of 10 percent in approved utility investment since June 2023. An additional \$1.2 billion in investments were awaiting approval from state utility commissions. The Southeast represents just six percent of all approved investments, with \$394 million approved by the region's regulators. The funding approved to date is expected to support the deployment of more than 550 DCFC stations and more than 4,100 Level 2 stations. Florida utilities lead with \$278.2 million in approved investments followed by Georgia with \$82.5 million, North Carolina with \$24.7 million, and South Carolina with \$8.8 million. There has been no movement related to utility EV infrastructure programs in the Southeast in the past 12 months.

Evaluating investment on a per-customer basis allows for easier comparison across utility territories, highlighting each utility's commitment to transportation electrification and the willingness of regulators to incorporate these investments into the rate base. Nationally, the average was \$38 in approved investment per utility customer, with the highest per capita investment in California, Massachusetts, and Nevada, respectively. While all utilities in the Southeast rank lower than the national average, Florida Power & Light and Duke Energy are closest to the national average at \$36 per customer.

Table 3. Investor-Owned Utility Investments in the Southeast

Operating Company	State	Investment	Customers	Investment per Customer
Florida Power & Light	Florida	\$205,000,000	5,739,183	\$36
Duke Energy	Florida	\$70,900,000	1,943,962	\$36
Georgia Power Company	Georgia	\$82,500,000	2,712,780	\$30
Duke Energy	North Carolina	\$24,714,675	4,480,301	\$6
Tampa Electric	Florida	\$2,300,000	819,767	\$3
Duke Energy	South Carolina	\$8,830,000	4,480,301	\$2
U.S. Total		\$6,552,619,142	171,028,279	\$38

“Investment” refers to funding in transportation electrification from investor-owned utilities approved by state commissions. “Investment per Customer” refers to the total utility investment divided by the number of residential customers, rounded to the nearest whole dollar. For the “U.S. Total” figure, the total investment is divided by the number of customers served by utilities that have announced investments in transportation electrification and therefore does not include utilities where no investments have been approved. Duke Energy customer data in North and South Carolina was drawn from a Duke Energy fact sheet as of April 1, 2023 (Duke Energy, 2023). Alabama Power is not included here as the company’s EV programs were not submitted to the state’s Public Service Commission. Data is through June 30, 2024.

Source: [Atlas EV Hub](#) [3] for the Southern Alliance on Clean Energy

In the past year, Southeast utilities have moved from proposing charging infrastructure investments to having commissioners in the region address these proposed investments in transportation electrification. IOUs can fund transportation electrification programs using program-generated revenue, through cost recovery via the electricity rate base, and by using the utility’s capital.

In January, the South Carolina Public Service Commission approved Duke Energy's make-ready infrastructure program called the Charger Prep Program [30], which mirrors Duke’s previously approved program in North Carolina. This voluntary three-year program, with costs covered by the program’s revenue, offers EV charging incentives to both residential

and non-residential customers, specifically supporting the adoption of EVs, Level 2, and DCFC chargers through revenue-based credits that offset a portion of EV “make ready” expenses. However, the utility withdrew its application for approval of its Electric Vehicle Supply Equipment (EVSE) program in March, citing “disagreements about fundamental aspects” of the program across parties involved [31]. Though the EVSE program was nixed in South Carolina, Duke launched the same program in North Carolina as the Charger Solutions program in January 2024 [32].

In December 2023, Duke Energy submitted a filing for approval to the North Carolina Utilities Commission, proposing an off-peak charging program. The off-peak charging program utilizes a monthly billing credit of \$7.50 as a proxy for adopting a TOU rate schedule and charging electric vehicles during off-peak hours. The filing is awaiting the Commission’s decision [33]. This filing followed Duke Energy’s previous efforts in South Carolina, where a similar Make Ready Credit Program was approved in January 2024. These initiatives detail the company’s approach to rolling out consistent EV infrastructure programs across its service territories, acknowledging the need for a coordinated regional strategy rather than piecemeal state-by-state efforts.

In addition to leveraging program-generated revenue, IOUs in the Southeast have developed various programs designed to support the adoption of EVs and charging infrastructure, utilizing other cost recovery mechanisms such as rate cases.

In April 2024, Duke Energy filed its Make Ready Credit Program, Off Peak Credit Program, and Fleet Advisory Program as part of its rate case to the Florida Public Service Commission [34]. The Make Ready Credit Program offers residential and non-residential customers nearly \$16 million in credits over two years for the installation of Level 2 and DCFC, serving single family homes, workplaces, public spaces, fleets, school buses and transit buses. The Off-Peak Credit Program offers financial incentives to residential customers who charge their EVs during off-peak hours, offering participants who charge during non-peak hours a \$10 monthly credit. The utility is also allocating over \$3 million over three years for its Fleet Advisory Program, which was repackaged from the Charger Solutions program mentioned above, assisting non-residential fleet customers interested customers in understanding the benefits of electrifying their commercial vehicle fleets. The utility plans to defer the costs related to revenue credits as a regulatory asset and then recover those costs over time through gradual rate adjustments. This approach will ensure that the utility can recover the investment without significantly impacting its short-term financials.

The progression of these filings across North Carolina, South Carolina, and Florida underscores the necessity of regional energy planning, as Duke Energy navigates varying regulatory environments while maintaining a consistent approach to EV infrastructure development across its multiple jurisdictions.

Public Funding for Transportation Electrification

Public funding has played an important role in the acceleration of transportation electrification in the Southeast this past year (Table 4). Southeast states have been increasingly leveraging federal funding opportunities alongside much smaller, state-provided funds. In the past 12 months, the Southeast has seen increases in federal funding for transportation electrification by \$268 million and state funding by just \$1.2 million. Alabama is the only state in the region to have increased state funding for transportation electrification this past year.

To date, states in the Southeast have benefitted from federal transportation electrification funding, however South Carolina is the only state with a federal funding per capita number, \$44.94, higher than the national average of \$39.60. Southeast states are closer to the national average for federal funding than for state funding, looking at per capita data. State funding in the Southeast ranges from \$0.46 to \$7.05 per capita, compared to the national average of \$29.85 per capita. Nearly all funding, approximately 98 percent, comes from the VW Settlement. Florida outpaces all other states in the region with \$7.05 in state funding per capita, while South Carolina has the lowest state funding per capita in the region at just \$0.46.

Table 4. Key Indicators for Public Funding in the Southeast

State	State Funding for Electric Transportation (millions)	State Funding for Electric Transportation per Capita	Federal Funding for Electric Transportation (millions)	Federal Funding for Electric Transportation per Capita
Alabama	\$8.2	\$1.68	\$137.4	\$28.17
Florida	\$147.4	\$7.05	\$486.6	\$23.28
Georgia	\$8.9	\$0.86	\$376.8	\$36.17
North Carolina	\$50.2	\$4.89	\$367.8	\$35.83
South	\$2.3	\$0.46	\$225.6	\$44.94

State	State Funding for Electric Transportation (millions)	State Funding for Electric Transportation per Capita	Federal Funding for Electric Transportation (millions)	Federal Funding for Electric Transportation per Capita
Carolina				
Tennessee	\$10.4	\$1.56	\$266.5	\$39.77
Southeast	\$227.5	\$3.91	\$1,860.2	\$31.98
U.S. Total	\$9,690.9	\$29.85	\$12,857.9	\$39.60

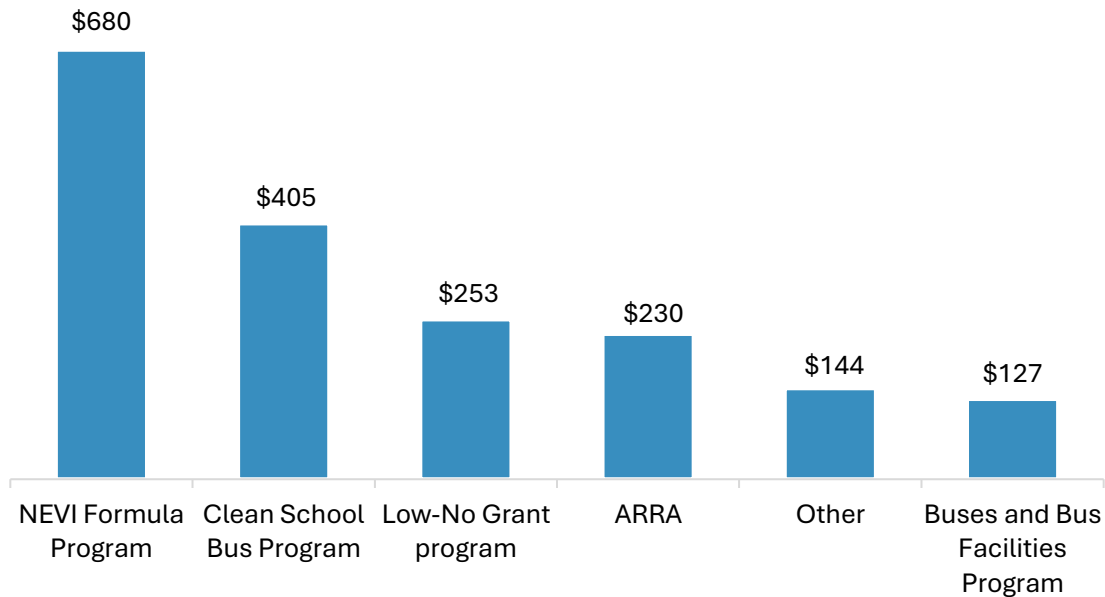
This table depicts public funding allocated, awarded or made available to states in the Southeast. In this summary, state funding includes VW Settlement funds dispersed by the state. Federal funding excludes loans. Data is through June 30, 2024.

Source: [Atlas EV Hub](#) [3] for the Southern Alliance on Clean Energy

Federal Funding

Through the end of June 2024, \$1.86 billion has been made allocated or awarded from federal grant programs for transportation electrification in the Southeast, with the majority going toward buses and bus facilities. This translates to a nearly 17 percent increase in federal funding for states in the region compared to the same time in 2023. Funding allocated or awarded in the past 12 months includes \$234.4 million for electric school buses from the U.S. Environmental Protection Agency’s Clean School Bus Program and \$33.7 million from the NEVI program and Charging and Fueling Infrastructure (CFI) program, administered by the FHWA. NEVI has been predominantly used to fund chargers along highways as it is specifically designed to build out a national network of EV chargers along designated corridors. CFI is more generally applied to a variety of alternative fueling infrastructure and prioritizes underserved and rural communities. Although most funding in the last 12 months came from the Clean School Bus Program, to date NEVI is the largest source of funding that will be used to build out the Southeast’s portion of a national EV charging network along the country’s primary highway corridors (Figure 9).

Figure 9. Federal Transportation Electrification Funding by Program in the Southeast (\$ millions)



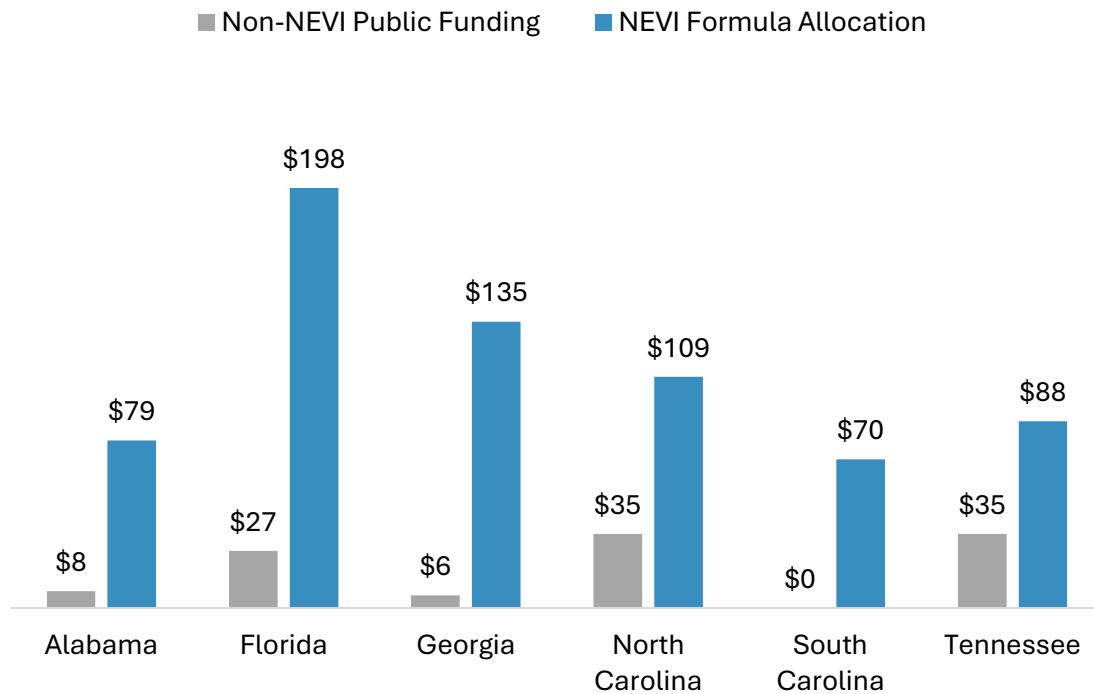
This table depicts federal funding allocated, awarded, or made available to states in the Southeast. ARRA includes multiple funding programs. Category for ‘Other’ includes Airport Zero Emission Vehicle and Infrastructure Pilot Program Grants, CFI, Congestion Mitigation and Air Quality Improvement, Diesel Emissions Reduction Act, RAISE/BUILD/TIGER (Rebuilding American Infrastructure with Sustainability and Equity formerly known as Better Utilizing Investments to Leverage Development and Transportation Investment Generating Economic Recovery), Small Business Innovation Research, and Vehicle Technologies Office funding. This chart does not include loans. Data is through June 30, 2024.

Source: [Atlas EV Hub](#) [3] for the Southern Alliance on Clean Energy

National Electric Vehicle Infrastructure (NEVI) Program

To aid the buildout of its growing charger network, the Southeast is beginning to mobilize its allocated NEVI funding. The NEVI program requires each site to support simultaneous charging of at least four vehicles with DCFC at 150 kilowatts (kW) each for a minimum total site power of 600 kW. NEVI requires a minimum station uptime of 97 percent to address reliability issues with some existing public charging [35] [36]. In return for meeting site specifications, NEVI will cover up to 80 percent of eligible project costs. In total, the region is eligible for a sum of \$679.7 million from the federal government to build public charging stations through fiscal year (FY) 2026 [37]. As seen in Figure 10, NEVI funding will far exceed existing public investments in EV charging in the Southeast.

Figure 10. Public Funding for EV Charging in the Southeast (\$ millions)



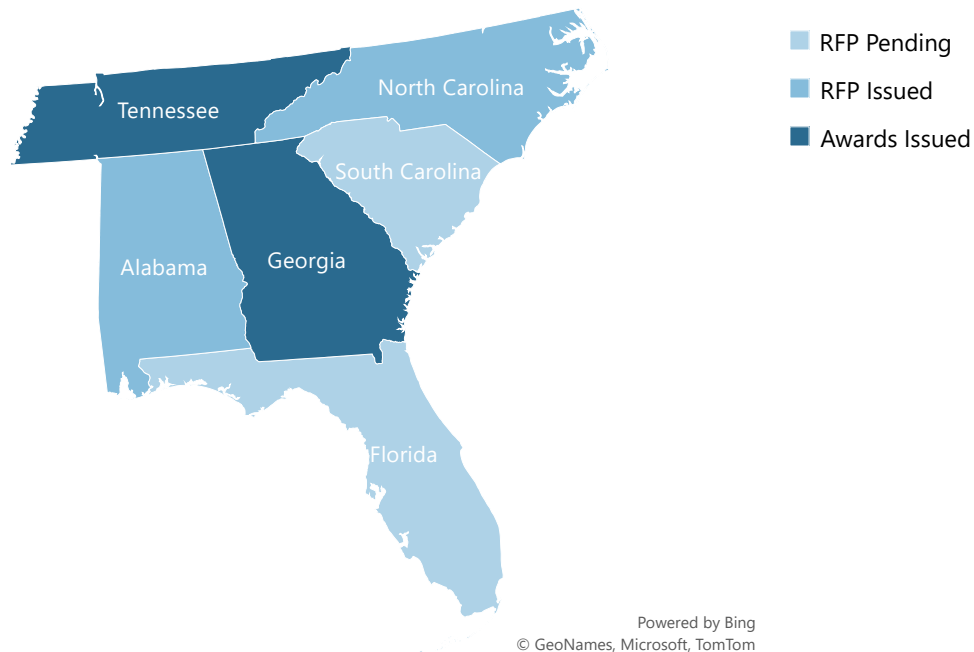
This figure depicts public funding for EV charging awarded or made available to date compared against each state's five-year NEVI program formula allocation. The public funding to date includes both light-duty and some medium and heavy-duty charging infrastructure. Data is through June 30, 2024.

Source: [Atlas EV Hub](#) [3] for the Southern Alliance on Clean Energy

Tennessee and Georgia are the only states in the region to have awarded funding to sites, though none have started construction (Figure 11). In January 2024, Tennessee awarded \$21.9 million for 30 sites from the first round of NEVI funds, which was matched by \$10.7 million in private-sector investments. Then in February 2024, through a public-private partnership agreement that combines federal funding and private investment, Georgia conditionally awarded an undisclosed amount of funding to five sites from their first round of NEVI funding. The Georgia Department of Transportation also issued their notice of intent to issue a request for proposal (RFP) for the second round of NEVI funding in July 2024. Both North Carolina and Alabama are in the process of reviewing first-round RFP applications and proposals for sites as of June 20, 2024. While South Carolina has not issued an RFP yet, they have been busy running a robust public engagement process through their SC + EV initiative as they prepare to roll out funding in phases [38]. Florida remains the only state in the region that has yet to make any movement on issuing NEVI funds, taking a much

different approach to EV state support, launching its roadsarenotforpolitics.com website [39]. Figure 11 highlights the NEVI state of play in the Southeast as of June 30, 2024.

Figure 11. NEVI Activity in the Southeast



The map above highlights state NEVI activity in the Southeast. “RFP Pending” indicates that the state has yet to solicit applications from private entities to install NEVI-funded chargers. “RFP Issued” indicates that the state has made NEVI funds available to private entities through a competitive grant application process. “Awards Issued” indicates that the state has awarded funds to private entities through a competitive grant application for the build-out of NEVI-funded chargers. Data is through June 30, 2024. Additional developments since include that Alabama issued first-round awards on July 1, 2024, North Carolina announced first-round awards on September 9, 2024, and Georgia reviewed its second round of proposals.

Source: [Atlas EV Hub](#) [3] for the Southern Alliance on Clean Energy

Charging and Fueling Infrastructure (CFI) Program

In addition to NEVI funding, another catalyzing federal program for EV charger deployment and alternative fuel infrastructure, the CFI program, is providing the Southeast with funding. IIJA makes available \$2.5 billion over five years for the program. Priority is given to rural areas, low- and moderate-income neighbors, and communities with low rates of private parking. The first round of funding, disbursed in January 2024, awarded \$623 million to 47 projects in 22 states [40]. Georgia and North Carolina received a combined \$12 million, just

two percent of all funding awarded to states across the country. Funding will be used to install up to 400 Level 2 chargers in the Atlanta Metro Area and 54 DCFC and Level 2 chargers near nationally designated Alternative Fuel Corridors across North Carolina [41]. The second round of CFI funding was open from May through August 2024, with up to \$1.32 billion available for state and local governments, tribes and affiliated groups, and others. Up to \$800 million will fund CFI round two applications, while \$521.2 million will fund applications previously submitted but not selected for awards during the first round.

The goals of NEVI and CFI programs call for charging built out in the Southeast to be reliable, affordable, accessible, and equitably distributed. Announced in January 2024, the EV Charger Reliability and Accessibility Accelerator dedicates \$150 million to repair and replace existing chargers [42]. The program is focused on addressing charging stations categorized as “temporarily unavailable” under the Alternative Fuels Data Center (AFDC) Station Locator, with work kicking off in the second half of 2024. The AFDC estimates there are currently more than 5,100 stations marked as temporarily unavailable, with 686 of them being in the Southeast [43]. The funding will be disbursed to 24 recipients across 20 states, none of it flowing to the Southeast.

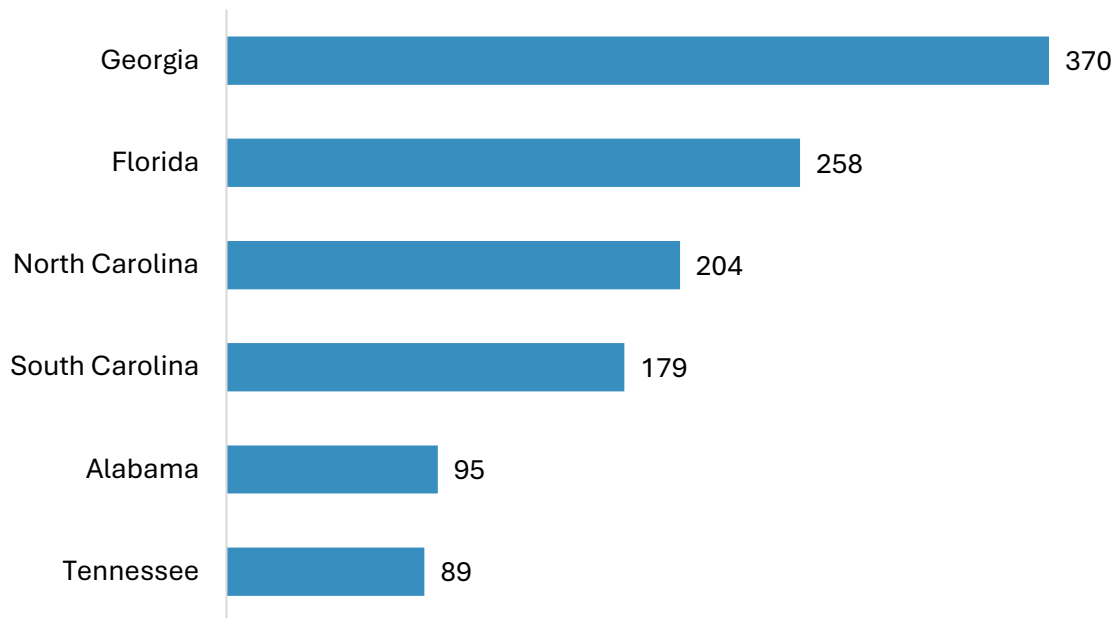
Electric Transit and School Buses

Funding from IIJA has been a key driver in MDHD EV adoption in the Southeast, especially for electric transit and school buses. To date, the IIJA funded Clean School Bus Program has awarded \$2.75 billion out of \$5 billion in grants and rebates for nearly 1,300 school districts to purchase zero-emissions and clean school buses [44]. This funding will help replace 8,651 buses with options that emit fewer pollutants into the atmosphere and improve air quality.² To date, 98 percent of clean school bus funding has gone towards purchasing electric buses to replace old diesel buses, including \$405 million awarded to school districts in Southeast states. Georgia leads the region with a total of \$130 million awarded for electric school buses, capturing nearly a third of the region’s funding. Georgia also ranks 8th nationally for funding awarded through the program for electric school buses. After the first round of awards were announced in 2022, two more rounds of awards have been distributed from the Clean School Bus Program within the past 12 months, one for rebates and one for grants. Grant recipients are selected after evaluation and scoring of applications and are given more support and flexibility in funding during the project, while rebate recipients are selected through a lottery process and provided less support and flexibility [45]. The Southeast has been awarded \$146.1 million in grants and \$258.9 million

² This total number of buses and funding reported by the EPA includes electric and non-electric options and includes Puerto Rico, in addition to all 50 states. Data from EV Hub focuses only on funding for electric school buses and does not include Puerto Rico.

in rebates for electric school buses. Together, these three rounds of funding have enabled the purchase of 1,195 electric school buses across the region (Figure 12).

Figure 12. Electric School Buses Purchased with EPA's Clean School Bus Program Funding in the Southeast



This chart depicts the total number of electric school buses purchased by states in the Southeast using EPA's Clean School Bus funding including both the grant and rebate programs. Data is through June 30, 2024.

Source: U.S. EPA's Clean School Bus Program [46]

In addition to electric school buses, the Southeast has also been a recipient of more than \$392 million in federal funding for electric transit buses and bus facilities. Programs supporting electric transit buses include the Buses and Bus Facilities Program, Congestion Mitigation and Air Quality Improvement, Diesel Emissions Reduction Act, the Low-No Grant Program, and Rebuilding American Infrastructure with Sustainability and Equity (formerly known as Better Utilizing Investments to Leverage Development and Transportation Investment Generating Economic Recovery) program funds. Of this funding, \$242.8 million was awarded after IIJA was signed into law. Florida has benefited from funding the most, with \$101 million in awarded funds to date for electric transit buses.

Federal Tax Incentives from IRA to Mobilize Electric Cars, Trucks and Buses

The IRA provides programmatic incentives for domestic production, purchase, and use of EVs and EV charging equipment through its disbursement of tax credits [47]. These financial incentives benefit individual consumers, manufacturers, fleet operators, and government entities.

Manufacturing Credits

Production is supported by the Advanced Manufacturing Production Tax Credit (45X) for production of batteries and battery materials and the Qualifying Advanced Energy Project Credit (48C). Together, these tax incentives are encouraging companies to establish EV supply chain operations in the U.S. and empowering consumers to purchase an EV. Round 1 allocations for 48C projects located in energy communities were announced on March 29, 2024, with 36 recipients self-disclosing project information [48]. Of the recipients announced, five of these projects will operate facilities in the Southeast involved in the EV supply chain. There will be one project each in Georgia, Tennessee, and South Carolina, and two projects in Alabama. Operations at these facilities range from battery and battery parts production to vehicle parts like electric motors and structural materials like steel. The Internal Revenue Service is set to announce Round 2 allocation decisions from the 48C program no later than January 15, 2025. Other EV manufacturing projects in the Southeast will likely take advantage of the two production tax credits but have chosen not to disclose the funding.

Consumer Credits

The IRA also provides individual consumers with up to \$7,500 for the purchase of a new EV through the Clean Vehicle Tax Credit (30D) and up to \$4,000 for the purchase of a used EV through the Used Clean Vehicle Tax Credit (25E) [49]. In July 2024, the U.S. Treasury announced that the federal government had issued more than \$1.5 billion in tax credits to buyers of electric vehicle [50]. Of the 250,000 EV purchasers, 93 percent of new EV purchasers and 83 percent of used EV purchasers, claimed the tax credit at the point of sale. Prior to 2024, EV buyers had to wait until filing their taxes to receive the credit, now they can get the EV tax credit upfront regardless of their federal tax liability. The credit was designed to make the cars much more price competitive and, in some cases, cheaper than comparable internal combustion engine vehicles.

Commercial and Charging Credits

The Commercial Clean Vehicle Credit (45W) allows businesses and tax-exempt organizations to purchase a clean vehicle to replace a non-zero-emissions vehicle (ZEV) [51]. The up to \$40,000 tax credit can be used for vehicles powered by fuel cells and

batteries (including plug-in hybrids). Businesses and organizations can claim up to \$7,500 for light-duty vehicles through the 45W credit for consumer leasing purposes. Additionally, there is a tax credit for the purchase of charging equipment or alternative fuel refueling equipment (30C)—ethanol, natural gas, hydrogen, biodiesel, and others—worth up to \$1,000 and \$30,000 for residential and commercial uses, respectively [52].

VW Settlement and Other State Funding

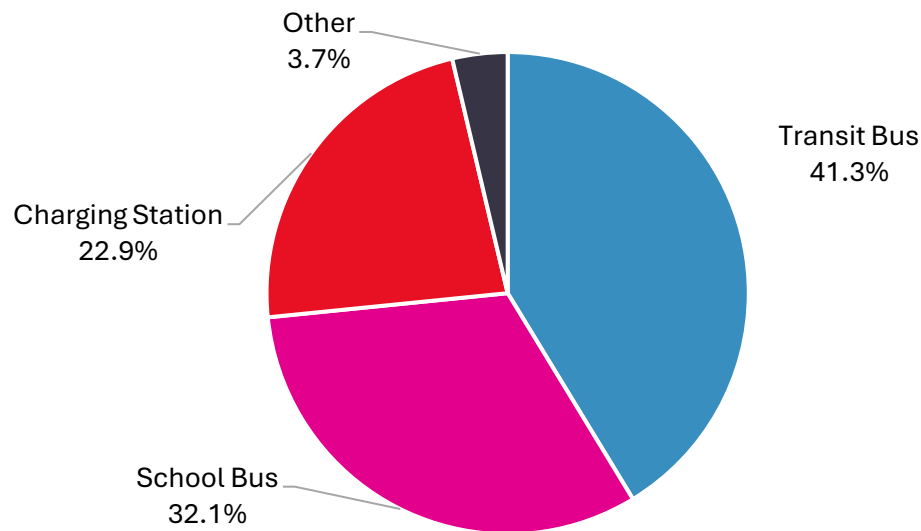
States in the Southeast have awarded or made available \$227.5 million for transportation electrification. State funding includes the small amount of funds appropriated by states and funding administered through the VW Settlement program.³ The VW Settlement is the only source of state funding in all Southeast states except for Alabama.

In the past 12 months, states have made little progress on making more funding available, and no additional funding has been disbursed by states from the VW Settlement program. The only state funding awarded was via the Alabama Electric Vehicle Charging Infrastructure Program, \$1.2 million for charging infrastructure deployment. This program receives a portion of its funding for charging stations from the annual EV registration fees paid by EV drivers [53]. Awarded in August 2023, this funding is being used to construct 14 charging stations along the state’s eastern corridor. To date, electric transit and school buses have accounted for more than 73 percent of state funds awarded and charging stations made up nearly 23 percent of state funds awarded (Figure 13).

While no movement was made this past year to award additional VW Settlement funds to states in the Southeast, there is still funding available for the region that has yet to be awarded. Starting from 2018, the region has been awarded \$367.8 million in VW Settlement funds, with more than 60 percent of those funds being used for electric transportation. The region has been allocated \$427.1 million in funds from the settlement, meaning that there is still \$59.3 million to be awarded to states in the Southeast in the future.

³ The VW Settlement was established to resolve allegations that Volkswagen violated the Clean Air Act, requiring the automaker to pay \$2.9 billion for states to appropriate to remediate excess nitrogen oxides emissions from their vehicles. The Southeast has been allocated \$427 million from the settlement fund.

Figure 13. State Funding by Electric Transportation Project Type in the Southeast



This figure depicts state funding by project type for the Southeast region to date and includes VW Settlement funds. The public funding to date includes state funding categories only and does not account for federal funding. Data is through June 30, 2024.

Source: [Atlas EV Hub](#) [3] for the Southern Alliance on Clean Energy

State-Level Policy and Programs to Advance EVs

States are developing plans, policies, and regulations impacting EV adoption and infrastructure. In some instances, these actions encourage EV adoption though others raise barriers to EVs. Particularly in the Southeast, state governments have demonstrated some backing of the EV transition, either through executive or legislative action. Their efforts are reflected in the debates they have in legislative chambers, policies and initiatives enacted aimed at promoting the expansion of EVs and charging infrastructure.

Legislative Developments

In the past year, two considerable EV-related bills moved through the Florida state legislature. Among the key legislative developments, Florida House Bill 1645, a

comprehensive energy bill with significant provisions affecting EVs, successfully passed both chambers of the state's legislature and was signed into law by the governor on May 15, 2024. This law has both upsides and downsides for EVs in Florida. The upside is that it authorizes the Florida Public Service Commission to approve voluntary residential EV charging programs allowing for charging incentive programs for homeowners and businesses. However, the downside is the elimination of fuel efficiency as a procurement consideration for state government vehicles, potentially reducing the number of EVs in the state fleet.

Additionally, Florida's Senate Bill 1084, preempts local municipalities from establishing or enforcing their own ordinances or regulations related to EV charging stations, making Florida the first state in the nation to pass such a law. While the bill's intent is to streamline regulations and ensure uniform enforcement of EV charging stations, it has the potential to hinder municipalities' ability to address unique challenges associated with EV deployment at the local level. The bill passed both chambers of the state's legislature and was signed into law in May 2024.

Florida's neighbor to the north, Georgia, has also been active in introducing EV-related legislation. Georgia's Senate Bill 146 proposes an EV charging tax of 26 cents per 11 kilowatt-hours at public EV charging stations, sparking debate over the fairness of such fees. On the market-enabling side, the bill also allows EV charging providers to sell electricity by the kilowatt-hour at public charging stations. This provision aligns with the requirements of key funding programs like the NEVI program, facilitating the acquisition of funds from these programs. In response, Georgia passed House Bill 516 in May 2024, delaying the implementation of the EV charging tax until 2026 to allow more time to determine the best approach for administering it [54].

Legislators in North Carolina have been considering EV-related legislation over the past year. In particular, North Carolina's 2023 Appropriations Act was signed into law on October 3, 2023, which raises the registration fee for EVs to \$180 and \$90 for PHEVs.

Workforce Development

To support the widespread adoption of EVs in the United States, a diverse, skilled, and fully developed workforce is essential. The National Association of State Energy Officials (NASEO) identified four critical areas for workforce development [55]:

1. Workforce Development Consortia and Special Programs;
2. Manufacturing;
3. Automotive Maintenance and Service, and
4. Electrician and EV Charging Infrastructure.

Regarding electrician training, the NEVI program mandates that the workforce responsible for installing, maintaining, and operating EV chargers must possess appropriate licenses, certifications, and training, either through the Electric Vehicle Infrastructure Training Program (EVITP) or a state-based equivalent continuing education credit. EVITP offers specialized training and certification for electricians involved in installing EV charging infrastructure [56]. According to the Joint Office, most states have addressed the need for EVITP certifications in their NEVI plans [57].

These focus areas are crucial for building a robust and capable EV workforce. The following sub-sections will compare efforts⁴ in the Southeast against each of these areas.

Workforce Development Consortia and Special Programs

Workforce development consortia and special programs are essential to ensure that states are ready and preparing for a strong EV workforce. In the Southeast, the Mississippi, Alabama, Georgia Network for Electric Vehicle Technologies (MAGNET Project) exemplifies this approach. This joint effort, involving the University of Alabama, the University of Georgia, and Mississippi State University, aims to build capacity for educating a capable EV workforce by identifying workforce development activities. The MAGNET Project received a \$1 million award through the 2023 National Science Foundation [58]. Other notable programs include the University of Tennessee's "Advancing Technology-Enabled Mobility Solutions" workforce development program [59] and North Carolina A&T State University's "STEPS4GROWTH" program, which received \$23.7 million in funding through the American Rescue Plan Good Jobs Challenge Grant [60] [61].

Manufacturing

A secondary but equally crucial focus area for workforce development is in EV manufacturing. In the Southeast, EV manufacturing training programs are beginning to emerge, often jointly supported by colleges and automakers. For example, Hyundai and Savannah Technical College have collaborated to develop an Electric Vehicle Professional Technical Certificate of Credit, launched in May 2023 [62]. This certificate program prepares students for entry-level employment in EV manufacturing. Additionally, state and local subsidies play a significant role in supporting these training programs. Hyundai received a \$1.8 billion subsidy from Georgia for its EV plant near Savannah, the largest incentive package in the state's history, with \$117 million earmarked for workforce training programs [63]. Similarly, South Carolina awarded Scout Motors a \$1.3 billion subsidy for its EV plant in

⁴ Atlas Public Policy and SACE thanks the efforts of stakeholders who provided input on the programs described in the following sections.

Richland County, including \$25 million for a job training center at Midlands Technical College [64].

Automotive Maintenance and Service Training

With the increasing number of EVs on the road, support for EV maintenance is a growing industry need. NASEO highlights several colleges in the Southeast offering EV service and maintenance training programs. Notable examples include the Tesla START programs at Miami Dade College in Florida and Central Piedmont Community College in North Carolina [65]. Additionally, the Ford ASSET technician training program, which includes hybrid and EV training, is hosted by Gwinnett Technical College in Georgia [55]. In addition to college training programs, the South Carolina Auto Dealers Association's Auto Tech Development Program focuses on automotive technology and is working to incorporate an EV maintenance apprenticeship into its curriculum [66].

Electrician and EV Charging Infrastructure

Electrician and EV charging infrastructure training programs are beginning to take shape across various sectors in the Southeast. Notably, in June 2024, Wake Tech in North Carolina launched its first EVSE Field Technician Certificate course [67]. This six-week program, funded by the Siemens Foundation's EVeryone Charging Forward Initiative, offers comprehensive instruction in electrical systems and EVs. The curriculum covers essential topics such as electrical safety, charging station configuration and specifications, as well as maintenance and repair.

Additionally, job training organizations like Goodwill Industries are also investing in EVSE training. In January 2024, Goodwill launched its Clean Tech Infrastructure Academy in Georgia [68]. This four-week program provides students with 40 hours of training per week, where they earn \$15 an hour while learning how to become maintenance technicians for EVSE. These initiatives are helping to build a skilled workforce prepared to support the growing EV infrastructure in the region.

State-led planning efforts to develop an EV charging deployment workforce are also in place across the Southeast. Tennessee, for example, launched the Tennessee EV Charging Infrastructure Workforce Development Working Group, which meets monthly to address statewide workforce needs and support EV workforce advancements [69]. Similarly, South Carolina established its Interagency EV Working Group following the Governor's Executive Order [70] to deploy NEVI funding through the South Carolina Department of Transportation. This group, which also meets monthly, aims to expand EV jobs and training opportunities in South Carolina.

Other notable EV workforce training and development programs in the Southeast not mentioned above include:

- Hertz Electrifies America [71]
- SC Works [72]
- readySC [73]
- Apprenticeship Carolina [74]
- SUN Workforce Development [75]
- Trident Technical College: REVVED [76]
- SC Manufacturers Extension Partnership (SC MEP) [77]
- SC Department of Education: Electric Vehicle Fundamentals [78]
- Blue Ridge Community College’s “Expanding Electric Vehicle Infrastructure in Western NC” [79]

Conclusion

In recent years, the electric transportation market has witnessed unprecedented growth in the United States. The Southeast has emerged as a major hub for EV and EV battery manufacturing, with automakers announcing billions of dollars in investments, especially in Georgia, Tennessee, and the Carolinas. These investments are expected to translate into economic development and job creation, key indicators of a successful industry as the world competes for the future of electric transportation. EV sales in the Southeast continue to grow, and while all states trail the national average, Florida is not far from that benchmark. Meanwhile, critical public funding programs such as NEVI and CFI are unlocking millions of dollars for the buildout of EV charging infrastructure in the Southeast.

Transportation public officials across the region have been working to make public funds available to private entities, with most Southeast states already issuing competitive grant applications at the time of this report. As the industry ramps up its support for EVs and public funding continues to be disbursed in the Southeast, ongoing policy support is crucial. More proactive policy measures taken now at the state and local level will ensure that Southeast residents and fleet operators reap the rewards of better public health, a cleaner environment, and a thriving economy made possible by transportation electrification.

References

- [1] U.S. Census Bureau, "American Community Survey 5-Year Data (2009-2021)," U.S. Census Bureau, 15 June 2023. [Online]. Available: <https://www.census.gov/data/developers/data-sets/acs-5year.html>. [Accessed 12 July 2024].
- [2] M. Khatib, "Under new EPA emissions rule, EVs could make up 69 percent of all passenger vehicle sales by 2032," Atlas EV Hub , 25 March 2024. [Online]. Available: <https://www.atlasevhub.com/weekly-digest/under-new-epa-emissions-rule-evs-could-make-up-69-percent-of-all-passenger-vehicle-sales-by-2032/>. [Accessed 7 August 2024].
- [3] "EV Hub," Atlas Public Policy, [Online]. Available: <https://www.atlasevhub.com/>. [Accessed 30 June 2024].
- [4] "EV Jobs Hub," Atlas Public Policy; The BlueGreen Alliance Foundation, [Online]. Available: <https://evjobs.bgafoundation.org/>. [Accessed 30 June 2024].
- [5] M. Stewart, "Hyundai Announces New Production Start Date at Metaplant America During Hyundai Day in Georgia," Hyundai Media Center, 26 February 2024. [Online]. Available: <https://www.hyundainews.com/en-us/releases/4080>. [Accessed 21 August 2024].
- [6] J. Amy and R. Bynum, "Automaker Rivian pauses construction of its \$5 billion electric truck plant in Georgia," Associated Press, 7 March 2024. [Online]. Available: <https://apnews.com/article/rivian-ev-georgia-plant-paused-97d89bd751961aad4a75b42ce7c051d7>. [Accessed 6 August 2024].
- [7] P. Nguyen, "Vietnam's VinFast delays US electric car plant amid market slowdown," Reuters, 12 July 2024. [Online]. Available: <https://www.reuters.com/business/autos-transportation/vietnams-vinfast-delays-us-electric-car-plant-amid-market-slowdown-2024-07-13/>. [Accessed 6 August 2024].
- [8] Toyota Motor, "TOYOTA BATTERY MANUFACTURING, NORTH CAROLINA (TBMNC)," Toyota Motor, [Online]. Available: <https://www.toyota.com/usa/operations/map/tbmnc>. [Accessed 6 August 2024].
- [9] State of Georgia, "Hyundai Motor Group Metaplant America," State of Georgia, [Online]. Available: <https://www.georgia.org/hyundaimotorgroup>. [Accessed 6 August 2024].

- [10] J. O. Paula Gardner, "Michigan wants to lead U.S. in electric vehicles. Ford turned elsewhere.," Bridge Michigan, 29 September 2021. [Online]. Available: <https://www.bridgemi.com/business-watch/michigan-wants-lead-us-electric-vehicles-ford-turned-elsewhere>. [Accessed 15 August 2024].
- [11] D. Shepardson, "@ford statement on Michigan and new plants announcement for Kentucky and Tennessee," Twitter, 29 September 2021. [Online]. Available: <https://twitter.com/davidshepardson/status/1443324643356577792?s=20>. [Accessed July 2024].
- [12] U.S. Department of Labor, "Department of Commerce and Department of Labor Good Jobs Principles," U.S. Department of Labor, [Online]. Available: <https://www.dol.gov/general/good-jobs/principles>. [Accessed 6 August 2024].
- [13] C. Domonoske, "The UAW won big in the auto strike — but what does it mean for the rest of us?," NPR, 12 November 2023. [Online]. Available: <https://www.npr.org/2023/11/12/1211602392/uaw-auto-strike-deals-ratified-big-three-shawn-fain>. [Accessed 22 August 2024].
- [14] The United Auto Workers, "UAW ANNOUNCES \$40 MILLION COMMITMENT TO ORGANIZING AUTO AND BATTERY WORKERS OVER NEXT TWO YEARS," The United Auto Workers, 21 February 2024. [Online]. Available: <https://uaw.org/uaw-announces-40-million-commitment-to-organizing-auto-and-battery-workers-over-next-two-years/>. [Accessed 25 July 2024].
- [15] C. Domonoske, "Big 3 autoworkers vote 'yes' to historic UAW contracts," NPR, 17 November 2023. [Online]. Available: <https://www.npr.org/2023/11/16/1212381342/gm-autoworkers-vote-yes-approve-uaw-contract-ford-stellantis>. [Accessed 29 August 2024].
- [16] M. Khatib, "UAW Continues to Organize at EV Factories," Atlas Public Policy, 17 June 2024. [Online]. Available: <https://www.atlasevhub.com/weekly-digest/uaw-continues-to-organize-at-ev-factories/>. [Accessed 25 July 2024].
- [17] R. Maruf, "Mercedes-Benz workers in Alabama vote against unionizing in blow to big UAW push," CNN, 17 May 2024. [Online]. [Accessed 25 July 2024].
- [18] Associated Press, "Workers at Georgia school bus maker Blue Bird approve their first union contract," Associated Press, 24 May 2024. [Online]. Available: <https://apnews.com/article/school-bus-contract-blue-bird-4dbd2d08fd9f0d57c0830417e5f484ff>. [Accessed 25 July 2024].
- [19] J. Whalen, "Governors of six Southern states warn workers against joining UAW union," The Washington Post, 16 April 2024. [Online]. Available:

<https://www.washingtonpost.com/business/2024/04/16/republican-governors-uaw/>.
[Accessed 6 August 2024].

- [20] A. McKee, "As workers train, Hyundai Metaplant salary picture takes shape," Georgia Public Broadcasting, 19 July 2024. [Online]. Available:
<https://www.gpb.org/news/2024/07/19/workers-train-hyundai-metaplant-salary-picture-takes-shape>. [Accessed 14 August 2024].
- [21] Associated Press, "Hyundai joins Honda and Toyota in raising wages after auto union wins gains in deals with Detroit 3," Associated Press, 14 November 2023. [Online]. Available:
<https://www.gpb.org/news/2023/11/14/hyundai-joins-honda-and-toyota-in-raising-wages-after-auto-union-wins-gains-in>. [Accessed 22 August 2024].
- [22] M. Kanell, "Hyundai to raise wages 25% for U.S. workers, will apply at Bryan County plant," Atlanta Journal-Constitution, 14 November 2023. [Online]. Available:
<https://www.savannahnow.com/story/business/2023/11/14/hyundai-to-raise-wages-will-apply-to-bryan-county-georgia-workers/71575261007/>. [Accessed 22 August 2024].
- [23] Q. C. News, "Frito-Lay's Charlotte facility becomes snack company's first fully stocked with electric vehicles," 14 November 2023. [Online]. Available:
<https://www.qcnews.com/business/frito-lays-charlotte-facility-becomes-snack-companys-first-fully-stocked-with-electric-vehicles/#:~:text=Tuesday%2C%20Frito%2DLay%20announced%20its,other%20location%20across%20North%20America..> [Accessed 20 September 2024].
- [24] "Charger Types and Speeds," U.S. Department of Transportation, [Online]. Available:
<https://www.transportation.gov/rural/ev/toolkit/ev-basics/charging-speeds>. [Accessed 22 August 2024].
- [25] IONNA, "Seven Automakers Unite to Create a Leading High-Powered Charging Network Across North America," 26 July 2023. [Online]. Available: <https://ionna.com/news/seven-automakers-unite>. [Accessed 11 July 2024].
- [26] IONNA, "IONNA Selects Durham, North Carolina as Headquarters and Announces New Executive Leadership Team," 11 June 2024. [Online]. Available:
<https://ionna.com/news/durham-headquarters>. [Accessed 11 July 2024].
- [27] "MDHD Charging Investment Dashboard," Atlas Public Policy, [Online]. Available:
<https://www.atlasevhub.com/materials/mdhd-charging-investment-dashboard/>. [Accessed 18 October 2024].
- [28] K.-C. (. Chu, K. G. Miller, A. Schroeder, A. Gilde and M. Laughlin, "National Zero-Emission Freight Corridor Strategy," March 2024. [Online]. Available:

<https://highways.dot.gov/newsroom/biden-harris-administration-releases-first-ever-national-strategy-accelerate-deployment>. [Accessed 18 July 2024].

- [29] U. E. I. Administration', "Investor-owned utilities served 72% of U.S. electricity customers in 2017," 15 August 2019. [Online]. Available: <https://www.eia.gov/todayinenergy/detail.php?id=40913>. [Accessed 7 August 2024].
- [30] T. P. S. C. o. S. Carolina, "Joint Application of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC for Approval of Make Ready Credit Program," 18 January 2024. [Online]. Available: <https://dms.psc.sc.gov/Attachments/Order/d14315ff-3e2e-41fc-b267-ef1e28230217>. [Accessed 18 July 2024].
- [31] C. L. Duke Energy, "Joint Application of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC for Approval of Electric Vehicle Supply Equipment Program Docket No. 2022-158-E," 1 March 2024. [Online]. Available: <https://dms.psc.sc.gov/Attachments/Matter/7e8dbcac-900b-4d85-afb7-724444e0f6ff>. [Accessed 23 August 24].
- [32] D. Energy, "Duke Energy launches EV charger rental program in North Carolina," 29 January 2024. [Online]. Available: <https://news.duke-energy.com/releases/duke-energy-launches-ev-charger-rental-program-in-north-carolina>. [Accessed 23 August 2024].
- [33] D. Energy, "Joint Application by Duke Energy Carolinas, LLC And Duke Energy Progress, LLC for Approval of Respective Off-Peak Charging Programs," 18 December 2023. [Online]. Available: <https://starw1.ncuc.gov/NCUC/ViewFile.aspx?Id=3e3d52b6-286d-46fc-bc86-4a9bb019c8dc>. [Accessed 14 August 2024].
- [34] D. E. Florida, "Docket 20240025-EI, Petition for Rate Increase by Duke Energy Florida, LLC," 2 April 2024. [Online]. Available: <https://www.floridapsc.com/pscfiles/library/filings/2024/01453-2024/01453-2024.pdf>. [Accessed 14 August 2024].
- [35] Federal Highway Administration, "National Electric Vehicle Infrastructure Formula Program," 22 06 2022. [Online]. Available: <https://www.federalregister.gov/documents/2022/06/22/2022-12704/national-electric-vehicle-infrastructure-formula-program>. [Accessed 02 August 2024].
- [36] D. Rempel, C. Cullen, M. Bryan and G. Cezar, "Reliability of Open Public Electric Vehicle Direct Current Fast Chargers," 07 04 2022. [Online]. Available: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4077554. [Accessed 02 August 2024].

- [37] Federal Highway Administration, "5-year National Electric Vehicle Infrastructure Funding by State," U.S. Department of Transportation, [Online]. Available: https://www.fhwa.dot.gov/bipartisan-infrastructure-law/evs_5year_nevi_funding_by_state.cfm. [Accessed 10 July 2024].
- [38] "SC+EV Initiative Background," SC + EV, [Online]. Available: <https://www.southcarolina-ev.com/about>. [Accessed 22 August 2024].
- [39] "Governor DeSantis Announces Transportation Investments and Congestion Relief," Office of Florida Governor Ron DeSantis, 27 June 2024. [Online]. Available: <https://www.flgov.com/2024/06/27/governor-desantis-announces-transportation-investments-and-congestion-relief/>. [Accessed 22 August 2024].
- [40] J. Lea, "Full Charge: A Look at Charging Infrastructure Funding Awards," Atlas Public Policy, 21 February 2024. [Online]. Available: <https://climateprogramportal.org/2024/02/21/full-charge-a-look-at-charging-infrastructure-funding-awards/>. [Accessed 11 July 2024].
- [41] U.S. Department of Transportation, "Federal Highway Administration's Charging and Fueling Infrastructure Discretionary Grants Program FY 2022- FY 2023 Grant Selections," Federal Highway Administration, 11 January 2024. [Online]. Available: <https://highways.dot.gov/newsroom/biden-harris-administration-announces-623-million-grants-continue-building-out-electric>. [Accessed 11 July 2024].
- [42] J. O. o. E. a. Transportation, "Nearly \$150 Million In Grant Funding Will Bolster Existing U.S. EV Charging Infrastructure," Joint Office of Energy and Transportation, 18 January 2024. [Online]. Available: <https://driveelectric.gov/news/reliability-accessibility-accelerator-grants>. [Accessed 14 August 2024].
- [43] A. F. D. Center, "Alternative Fueling Station Locator," U.S. Department of Energy, [Online]. Available: <https://afdc.energy.gov/stations#/find/nearest>. [Accessed 13 August 2024].
- [44] U.S. Environmental Protection Agency, "Clean School Bus Program Awards," [Online]. Available: <https://www.epa.gov/cleanschoolbus/clean-school-bus-program-awards>. [Accessed 12 July 2024].
- [45] U.S. Environmental Protection Agency, "2023 Clean School Bus Rebates," May 2024. [Online]. Available: <https://www.epa.gov/system/files/documents/2024-05/420b24034.pdf>. [Accessed 8 August 2024].
- [46] U.S. Environmental Protection Agency, "Clean School Bus Program Awards," U.S. Environmental Protection Agency, [Online]. Available:

<https://www.epa.gov/cleanschoolbus/clean-school-bus-program-awards#total-awards>. [Accessed 26 August 2024].

- [47] Internal Revenue Service, "Credits and deductions under the Inflation Reduction Act of 2022," 2022. [Online]. Available: <https://www.irs.gov/credits-and-deductions-under-the-inflation-reduction-act-of-2022>. [Accessed 22 July 2024].
- [48] Office of Manufacturing and Energy Supply Chains, "Applicant Self-Disclosed 48C Projects," U.S. Department of Energy, 19 April 2024. [Online]. Available: <https://www.energy.gov/mesc/applicant-self-disclosed-48c-projects>. [Accessed 22 July 2024].
- [49] Internal Revenue Service, "Credits for new clean vehicles purchased in 2023 or after," U.S. Department of the Treasury, 2023. [Online]. Available: <https://www.irs.gov/credits-deductions/credits-for-new-clean-vehicles-purchased-in-2023-or-after>. [Accessed 22 July 2024].
- [50] J. Bikales, "EV tax credit savings hit \$1.5B, Treasury says," Politico, 31 July 2024. [Online]. Available: <https://subscriber.politicopro.com/article/2024/07/ev-tax-credit-savings-hit-1-5-billion-treasury-says-00171932>. [Accessed 6 August 2024].
- [51] Internal Revenue Service, "Commercial Clean Vehicle Credit," U.S. Department of the Treasury, 2022. [Online]. Available: <https://www.irs.gov/credits-deductions/commercial-clean-vehicle-credit>. [Accessed 22 July 2024].
- [52] Electrification Coalition, "INFLATION REDUCTION ACT & EVS," Electrification Coalition, [Online]. Available: <https://electrificationcoalition.org/work/federal-ev-policy/inflation-reduction-act/>. [Accessed 8 August 2024].
- [53] Alternative Fuels Data Center, "Alabama Laws and Incentives," U.S. Department of Energy, [Online]. Available: [https://afdc.energy.gov/laws/all?state=AL#:~:text=\(Reference%20Alabama%20Public%20Service%20Commission,Alternative%20Fuel%20Taxes](https://afdc.energy.gov/laws/all?state=AL#:~:text=(Reference%20Alabama%20Public%20Service%20Commission,Alternative%20Fuel%20Taxes). [Accessed 29 August 2024].
- [54] E. Coalition, "Georgia Gov. Kemp Signs HB 516, Extending Implementation Date of kW/hr Taxes on EV Charging Stations," 13 May 2024. [Online]. Available: <https://electrificationcoalition.org/georgia-gov-kemp-signs-hb-516-extending-implementation-date-of-kw-hr-taxes-on-ev-charging-stations/>. [Accessed 23 August 2024].
- [55] N. A. o. S. E. O. (NASEO), "Building an EV Workforce: A Review of Southeast Transportation Electrification Workforce Development Training Programs," 24 March 2024. [Online]. Available:

https://www.naseo.org/data/sites/1/documents/publications/Building%20an%20EV%20Workforce_v3.pdf. [Accessed 7 August 2024].

- [56] E. Coalition, "Preparing the Workforce for EV Charging: Electric Vehicle Infrastructure Training Program Factsheet," 12 May 2023. [Online]. Available: <https://electrificationcoalition.org/wp-content/uploads/2023/08/UPDATED-AGAIN-EVITP-memo.pdf>. [Accessed 7 August 2024].
- [57] J. O. o. E. a. Transportation, "National Electric Vehicle Infrastructure Program Annual Report |," 2023. [Online]. Available: <https://driveelectric.gov/files/nevi-annual-report-2022-2023.pdf>. [Accessed 7 August 2024].
- [58] U. N. S. Foundation, "NSF Engines Development Award: Advancing a domestic value chain for electric vehicles (AL, MS, GA)," 8 September 2023. [Online]. Available: https://www.nsf.gov/awardsearch/showAward?AWD_ID=2302945&HistoricalAwards=false. [Accessed 14 August 2024].
- [59] U. N. S. Foundation, "NSF Engines Development Award: Advancing technology-enabled mobility solutions (TN)," 8 September 2023. [Online]. Available: https://www.nsf.gov/awardsearch/showAward?AWD_ID=2302896. [Accessed 7 August 2024].
- [60] N. C. B. C. f. E. (NCBCE), "STEPS4GROWTH (S4G) trains North Carolinians for careers in clean energy.," [Online]. Available: <https://ncbce.org/steps4growth/>. [Accessed 7 August 2024].
- [61] N. C. A. a. T. S. University, "N.C. A&T Lands \$23.7M Good Jobs Challenge Grant for Clean Energy Workforce Training," 3 August 2022. [Online]. Available: <https://www.ncat.edu/news/2022/08/good-jobs-challenge.php>. [Accessed 23 August 2024].
- [62] S. T. College, "Hyundai Motor Group Metaplant America (HMGMA) Job Training," [Online]. Available: <https://www.savannahtech.edu/hyundai-job-training/>. [Accessed 6 August 2024].
- [63] C. News, "Hyundai To Receive Largest Incentive Package in Georgia's History for Proposed Auto Plant," 25 July 2022. [Online]. Available: <https://www.costar.com/article/1159954838/hyundai-to-receive-largest-incentive-package-in-georgias-history-for-proposed-auto-plant>. [Accessed 7 August 2024].
- [64] W. News, "McMaster signs record-breaking \$1.3 billion incentive package to bring Scout Motors to Richland County," 20 March 2023. [Online]. Available:

<https://www.wistv.com/2023/03/20/gov-mcmaster-signs-bill-bringing-scout-motors-plant-richland-county/>. [Accessed 7 August 2024].

[65] Tesla, "Tesla START," [Online]. Available: <https://www.tesla.com/careers/tesla-start>. [Accessed 7 August 2024].

[66] S. C. A. Tech, "South Carolina Auto Tech Development (SCATD) Program," [Online]. Available: <https://scautotech.org/>. [Accessed 5 August 2024].

[67] G. o. N. Carolina, "North Carolina Pilots New Electric Vehicle Supply Equipment (EVSE) Field Technician Certification program," 27 June 2024. [Online]. Available: <https://governor.nc.gov/news/press-releases/2024/06/27/north-carolina-pilots-new-electric-vehicle-supply-equipment-evse-field-technician-certification>. [Accessed 7 August 2024].

[68] A. N. First, "Goodwill launches program training hundreds of people for clean energy jobs," 23 January 2024. [Online]. Available: <https://www.atlantaneWSfirst.com/2024/01/23/goodwill-launches-program-training-hundreds-people-clean-energy-jobs/>. [Accessed 8 August 2024].

[69] T. D. o. Transportation, "Tennessee Electric Vehicle Infrastructure (TEVI): 2023 Deployment Plan Update," 29 September 2023. [Online]. Available: https://www.tn.gov/content/dam/tn/tdot/long-range-planning/air-quality/tevi/Approved_Tevi_Plan_Update_2023.pdf. [Accessed 2 August 2024].

[70] S. Carolina-EV, "Interagency EV Working Group," [Online]. Available: <https://www.southcarolina-ev.com/interagency>. [Accessed 6 August 2024].

[71] Hertz, "Hertz and Mayor Dickens Launch "Hertz Electrifies Atlanta"," 19 April 2023. [Online]. Available: <https://newsroom.hertz.com/news-releases/news-release-details/hertz-and-mayor-dickens-launch-hertz-electrifies-atlanta>. [Accessed 29 August 2024].

[72] S. Works. [Online]. Available: <https://scworks.org/about-us>. [Accessed 29 August 2024].

[73] readySC. [Online]. Available: <https://www.readysc.org/about.html>. [Accessed 29 August 2024].

[74] A. Carolina. [Online]. Available: <https://www.apprenticeshipcarolina.com/>. [Accessed 29 August 2024].

- [75] S. U. National, "SUN WORKFORCE DEVELOPMENT," [Online]. Available: <https://solarunitednational.com/workforce-development>. [Accessed 29 August 2024].
- [76] Teknovation, "Trident Technical College forms consortium to train EV workforce," 26 May 2022. [Online]. Available: <https://www.teknovation.biz/trident-technical-college-forms-consortium-to-train-ev-workforce/>. [Accessed 29 August 2024].
- [77] SCMEP, "Training & Professional Development," [Online]. Available: <https://scmep.org/training-professional-development/>. [Accessed 29 August 2024].
- [78] S. C. D. o. Education, "Electric Vehicle Fundamentals," [Online]. Available: <https://ed.sc.gov/instruction/career-and-technical-education/programs-and-courses/cte-course-standards/2023-24-new-and-revised-cte-spring-course-standards-review/electric-vehicle-fundamentals/>. [Accessed 29 August 2024].
- [79] B. R. C. College, "Blue Ridge Receives Electric Vehicle Infrastructure Grant from Appalachian Regional Commission," 23 February 2024. [Online]. Available: [https://www.blueridge.edu/2024/02/23/blue-ridge-receives-electric-vehicle-infrastructure-grant-from-appalachian-regional-commission/#:~:text=The%20Appalachian%20Regional%20Commission%20\(ARC,will%20total%20over%20%24734k..](https://www.blueridge.edu/2024/02/23/blue-ridge-receives-electric-vehicle-infrastructure-grant-from-appalachian-regional-commission/#:~:text=The%20Appalachian%20Regional%20Commission%20(ARC,will%20total%20over%20%24734k..) [Accessed 29 August 2024].
- [80] "Right-To-Work Resources," The National Conference of State Legislatures, 19 December 2023. [Online]. Available: <https://www.ncsl.org/labor-and-employment/right-to-work-resources>. [Accessed 15 October 2024].
- [81] L. Feiveson, "Labor Unions and the U.S. Economy," U.S. Department of the Treasury, 28 August 2023. [Online]. Available: <https://home.treasury.gov/news/featured-stories/labor-unions-and-the-us-economy>. [Accessed 2024 18 October].



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